

defect  
8/28

# SCHOOL AND COLLEGE PLACEMENT

Journal of the Pennsylvania Association of School and College Placement

CLARENCE E. CLEWELL

Editor

## PUBLICATION OFFICES

3400 Walnut St., Philadelphia, Pa.

ELEANOR M. HIBSHMAN

Secretary of Publication

## EDITORIAL BOARD

PAUL W. BOYNTON, *Socony-Vacuum Oil Company*

GEORGE A. BRAKELEY, *Princeton University*

ALBERT B. CRAWFORD, *Yale University*

PAUL H. MUSSER, *University of Pennsylvania*

GEORGE F. PLIMPTON, *Harvard University*

ALEXANDER J. STODDARD, *Philadelphia Public Schools*

CLEMENT C. WILLIAMS, *Lehigh University*

NOTE: Members of the Editorial Board advise and offer suggestions in general, but do not necessarily approve or commend the contributions published in this Journal.

Vol. 1

October 1940

No. 1

A New Association.....	Thomas S. Gates	2
National Defense and Occupational Trends.....	Samuel Spiegler	3
Vocational Schools Respond "Ready Now".....	Paul L. Cressman	7
The Williamsport Plan.....	A. M. Weaver	10
Opportunities Tomorrow.....	Egbert H. van Delden	12
Education through Work Experience.....	Walter S. Cowing	14
Spare Hours to Sell.....	Oct. 1940 - May 1942 Clarence E. Lovejoy	19
Junior Achievement.....	R 370.5 v. 1-2 J. Blair Easter	24
Vacation Employment.....	Harold Myers	26
Recruiting for Industry (Academic Viewpoint).....	Fred W. Slantz	30
Recruiting for Industry (Industrial Viewpoint).....	P. W. Boynton	31
Vocational Guidance comes to College.....	William Pearson Tolley	36
Occupational Guidance in a Given Curriculum.....	J. H. Belknap	39
A Student Training Course.....	Thomas C. Ham	42
Pennsylvania's Job Mobilization Program.....	Lewis G. Hines	47
The President's Statement.....	Clarence E. Clewell	49
Association News and Notes.....		51
Letters to the Editor.....		53
Book Review and Digests.....		54
Contributors' Page.....		61

## INFORMATION FOR SUBSCRIBERS

SCHOOL AND COLLEGE PLACEMENT is issued four times a year. Subscription rate: \$2.00 a year.

Entered as Second Class Matter October 21, 1940, at the Post Office at Philadelphia, Pennsylvania, under the Act of March 3, 1879.

Copyright 1940 by the Pennsylvania Association of School and College Placement.

PRINTED IN THE UNITED STATES OF AMERICA

MAR 8 1949

# A NEW ASSOCIATION OF SCHOOL AND COLLEGE PLACEMENT

—THOMAS S. GATES—

*President of the University of Pennsylvania*

The Committee on Educational Cooperation of the Governor's Job Mobilization Program, on which I served as chairman, functioned on a State-wide basis under the leadership of Mr. W. D. Fuller, Chairman of the Pennsylvania Job Mobilization Committee, and of Mr. Wm. A. Hemphill, Executive Director, during the winter of 1939-40.

Our committee had scarcely started its work in December, 1939, as part of a very broad State movement to reduce unemployment, before it was realized that the educational aspects of the Governor's plan involved many items which could only be worked out successfully on a long-term basis.

The committee was faced with such fundamental topics as apprenticeship systems, improved ways of recruiting by firms, career implications in student part-time work, systematic methods for developing self-reliance and enthusiasm in the mind of youth, and an effort to improve the techniques of school and college placement, to mention a few of the subjects which came before the committee.

In the realization that our committee had

been formed as part of a temporary emergency program, and also that the schools and colleges could well take advantage of present trends for the benefit of youth, I took steps to establish the Pennsylvania Association of School and College Placement, and referred most of the problems which had come before my committee to this new organization, in the hope that they might be approached on a national basis. The use of the name *Pennsylvania* in the title of the Association relates solely to the fact that the Association came into existence as part of a widespread movement within that State during the winter of 1939-40. The program of the Association is, however, in no sense limited to state lines, but the breadth of its interest is indicated by the fact that its membership already extends into thirty states.

The possibilities of this new Association are very broad, and if the schools and colleges and the business and industrial firms will unite in a cooperative attack upon the program, it is believed that many helpful effects will result for the benefit of all groups. The program of the new Association will be watched with interest by all who are concerned with present problems related to the youth of the nation.

# NATIONAL DEFENSE AND OCCUPATIONAL TRENDS

SAMUEL SPIEGLER

*Managing Editor  
Occupational Index*

Several weeks ago the United States Civil Service Commission went on the air on a coast-to-coast hookup to advertise for "machinists, toolmakers, tool dressers, lofts-men, ship fitters, die sinkers, gauge makers, instrument makers, and lens grinders." The need for such men was urgent. Ordinary requirements had been relaxed. Men up to sixty-two years of age were eligible. Two years of apprenticeship would suffice instead of the four years customarily required. Three thousand skilled men were needed at once to operate the twenty-four-hour-a-day program of the Frankford Arsenal in Philadelphia. Many thousands applied. In three days of intensive interviewing and sifting, ninety-eight applicants were found who had the requisite skills.

Thus, dramatically, was revealed the prevailing scarcity of skilled men. The foretellings of those who had predicted that the breakdown of apprenticeship and the failure of all the agencies concerned—industry, labor, and education—to prepare replacements for the men forced out of the trades by unemployment and old age would result in a serious shortage of skilled labor were vindicated.

In a number of widely circulated journals recently youth has been urged to enter the skilled trades as a relatively sure means, in these times in which there is no absolute certainty of anything, of providing for their vocational futures. Now, many reports of skilled labor shortages are received with pained surprise and elaborate incomprehension in some union quarters; and it may take a little time to persuade union representatives that relaxation of restrictions on admission of apprentices is a desirable and necessary step to be taken promptly. Quite

aside from this, however, the long-term future of the skilled trades is not nearly so susceptible of prediction as some irresponsible publicists are striving to make it appear to be.

Predictions regarding the future, generally speaking, are based on projections of past trends and present tendencies, with due regard to the probable effects upon these trends and tendencies of other trends and tendencies. All of these can be known only as they have existed up to now, and only in terms of measurable results. Effects can be observed; causes can only be adduced. Judgment and interpretation here play the major roles. From this it follows that prediction is an undertaking beset with probabilities of error, most of which defy statistical estimation. Professional prognosticators, recognizing these limitations, qualify their predictions accordingly. But even the rankest amateur must work from what has happened in the past and what is happening in the present to what is likely to happen in the future. The observable facts are the same to him as to the professional.

What are the observable facts respecting the current need for skilled workers? The outstanding single fact is that the demand has been created by the war in Europe and the requirements of the United States defense program which derive from that war. Is this part of a trend? It is not. On the contrary it is a violent departure from a trend of some ten years, induced by an emergency of tremendous proportions. Whether or not it signifies the beginning of a new trend is for the future to reveal. There is small comfort, at present, in the reflection that the sudden demand, created by an urgent need for armaments and other

instruments of warfare, is likely to continue and to grow only so long as the need which created it continues to exist. On this ground, one might be forgiven a fervent prayer that the need for skilled men might fall off suddenly.

All this has nothing whatever to do with the reality and the urgency of the need itself. It is both very real and very urgent. The pressing cause for concern is whether, as in the case of battleships (which, like machinists, require some four years to complete), we shall have time to fill the need.

But we are concerned here with trends. And any prediction of a trend toward an increasing need over a long period for highly skilled labor is based on the fallacy of interpreting the present emergency need as part of a tendency. Several hundred thousand men are soon to be conscripted for military service. This is no reason for recommending the Army as a life work, or for assuming that such work has an assured future. There may be other very cogent reasons for both such a recommendation and such an assumption, but such reasons are outside the scope of the present discussion. Aside from the emergency, the outstanding occupational trend of the past few years has not been toward increasing opportunities for highly skilled workers, but for workers without highly developed specific skills.

This may sound like a heresy. Let us, therefore, as a distinguished (and presently somewhat disgruntled) contemporary might say, look at the record.

All through the depression, and indeed partly because of the heightened competitiveness created by the depression, technological innovations and improvements were introduced into industry in great numbers. No large new skilled labor requirements were created because the process was gradual, and personnel was trained or re-trained largely on the job. Displacements probably were numerous,

taken absolutely, but few as compare with the whole unemployed population; moreover, increased volume of employment resulting from one technological development tended, on the whole, to offset loss of employment occasioned by another elsewhere. Thus, while individuals, families and sometimes whole communities suffered or gained, the statistics of unemployment changed only slightly. But the general direction of the tendency was undeniably toward the displacement of manual labor by machines.

There can be not the slightest doubt that this displacement of hand labor by machine power was accompanied by a great increase in the proportion of technically skilled personnel. This was made necessary by the increasing complexity of the machines which made those production processes possible. But it is chiefly in the creation and the supervision of the machines that the greatest skills are needed. In their actual operation, for the most part, only limited and quickly acquired techniques are necessary. It has been in this area of specialized, limited skills that the major occupational demands of recent years have developed, and it is here that the great needs of the future probably will lie.

Even in the defense program itself this has become clear. A press release from the Federal Security Agency, which arrived in the mail as this article was being written, calls attention to the fact that in one month's time, approximately 3,000 workers have been trained and placed in jobs. As many as 20,000 new workers, the release goes on, may be in defense jobs by September. What does it mean to be "trained" in this sense? It means, undoubtedly, trained to perform some one or some few relatively simple operations employing hand tools, or to operate some one complicated but largely automatic machine tool. Upward of 80,000 persons now are enrolled in emergency



training centers throughout the country, being trained to fill their small but important places in the industrial program for national defense.

These are the kinds of places that are increasingly needing to be filled in industry, irrespective of defense needs. It may prove unfortunate for many of the present trainees, however, that their training has been so specific as it has in some cases. Their native versatility may possibly be impaired. The Federal Security Agency and the local educational institutions which have cooperated with it have no doubt acted with commendable wisdom and expedition in a grave situation. But while assurances are given to businessmen that they will be authorized to write off depreciation on investments in plants made necessary by the defense program at the rate of twenty percent a year, it might not be amiss for educators to give some thought to the problem of "amortizing" a tremendous investment of time and energy in the learning of wartimeskills, which many individuals will possess as their sole "capital" resources when and if the war (or peace) effort is ended.

In an industry in which the individual operation is highly specialized, versatility and adaptability may readily be more valuable as a vocational asset than broad technical proficiency. S. Theodore Woal, in the May, 1940 issue of *Occupations, the Vocational Guidance Magazine*, writes of the "automatization" of operations in manufacturing establishments. "In only one industry, (printing)" he says, "and there because of union control, were the operators required to set up the machines." Again, "... a worker's ability to make calculations is becoming less an asset. Only a few of the operations surveyed required a knowledge of addition and subtraction and, similarly, but a small proportion required a knowledge of multiplication and division." In another

place, Woal reports that "advances in production technique have drastically cut the training period required of production workers." "The over-all trend," he concludes, "is in the direction of the elimination of both the highly skilled and the most unskilled worker, with a growing body of semi-skilled production workers."

Here again arises the question of whether it is possible to project into the future any of the trends of the past. It may well be that we—the entire world—are at a turning point in history. It may be that the events of the very near future will so alter the conditions under which life is carried on that wholly new tendencies will be created.

What, for example, is going to happen to the trends of recent years toward expansion of social services? Less than a year ago, one could echo with complacency Beulah Amidon's sentiments, as expressed in the November, 1939 issue of *Independent Woman* that "the demand for social workers will continue for some time." Schools of Social Work are still having little trouble placing really competent people. Conscription, and all the concomitants of a great metamorphosis in the American way of life which could have been achieved in any other era only in time of war, certainly will not reduce the need for social services. But will we be able to pay for them? That is another question. As the preparedness program progresses, many trained social workers, psychologists, guidance workers, interviewers, and others concerned with individual adjustments to a complex society will doubtless come into the government service in one way or another. Other professional persons, such as doctors, dentists and veterinarians, may likewise be integrated into the program. Any large shifts of this sort from private civilian to military or at any rate public or quasi-public service might give rise to a need for more trained persons to fill the requirements of the

civilian population. The lawyers would be in a different situation. If legislation pursues its present tendency, few controversies arising out of the defense program will be subject to adjudication in the courts; and at the same time the withdrawal from civil life of numbers of conscripted men will reduce the volume of potential clients. On the other hand, minor civil actions against conscripts, such as suits for recapture of merchandise sold on installment, and to enforce fulfillment of leases and other contracts, may swell the legal business.

One group of occupations, at least, seems destined to afford increasing opportunities, regardless of the tempo of defensive preparations. These are the so-called service occupations. Cleaners and dyers, laundry operators, restaurateurs, and all the other multifarious tradesmen who have been taking over one by one the functions of the housewife and the householder of earlier generations probably will find demands for their services increased. The only possible development that might reverse this tendency would be such a contraction of living standards as to make luxuries again of what have come to be accepted largely as necessities of modern living.

Defense industries require large quantities of raw materials from mines, forests and farms. It might be concluded that the mineral, lumber and agricultural industries can expect a marked impetus. It is more likely, however, that limitations on exports will more than offset gains in domestic consumption. In the last war, American wheat filled the bellies of most of Europe, and grain prices soared to new highs. Coal and other power potentials were at a premium. Thus far, at least, the present war has had none of these effects. Major buyers of American raw materials have been cut off from our markets, and the home demand seems unlikely to offset the loss. On the whole, there is no reason to anticipate increased markets

for foods or mineral products; correlatively there are no indications that employment in these areas will increase or decrease markedly.

There has been a notable rise in recent years in "white-collar" occupations. The National Research Project of the Works Projects Administration, in its report on *Technology, Employment, and Output per Man in Copper Mining* says: "Greater specialization among workers and wider application of scientific production methods have also tended to increase the proportion of employees engaged in supervision, planning, record-keeping, and other occupations not directly concerned (in actual production). For example, in 1902, salaried employees having the above occupations amounted to 3 percent of the wage earners actually engaged in mining, whereas in 1929 they amounted to 8 percent." Already there has been such an increase in the amount of "paper work" that needs to be done in industries engaged on defense projects that considerable numbers of suitably trained and experienced persons are finding new jobs. This demand is likely to continue. Really efficient male stenographers and operators of modern office appliances are especially sought after.

Taking into consideration as many of the factors which it is possible to consider in such brief space, it seems probable that no marked changes will take place in the general occupational trends of recent years, with several exceptions. Unless very far-reaching social changes intervene—and this possibility no one would attempt to discount—the immediate future will probably see a sustained and slightly accelerating demand for skilled mechanics, engineers, chemists and other technically trained men in all industries; a slowly rising increase in social service occupations, including notably public health; and approximate stabilization of em-

(Continued on page 60)

# VOCATIONAL SCHOOLS RESPOND "READY NOW"

PAUL L. CRESSMAN

*Director, Bureau of Instruction  
Department of Public Instruction  
Commonwealth of Pennsylvania*

The vocational schools of America have, during the past summer months, responded in a remarkable way to the special request for the training of men for occupations essential to national defense. During the months of May and June national leaders pondered over the question as to just what agencies should conduct this national defense training.

## "Ready Now"

The United States Commissioner of Education, J. W. Studebaker, prepared a large book entitled "*Ready Now*." This set forth the fact that the public schools of America had \$1,500,000,000 invested in trade school buildings and trade school equipment.

Among the many illustrations included in Dr. Studebaker's book were two striking pictures of unusual interest. One showed a line several blocks long, of boys waiting to enroll in a new Buffalo trade school hours before the opening of the school. The other was a photograph of 2,000 men of all ages and nationalities in an auditorium waiting to enroll in trade extension classes in the public night school.

The chief purpose of "*Ready Now*" was to impress government officials and others with the constructive job being done by the schools at the present time, and to show that they were capable and willing to do much more in this period of emergency. The book found its way into the offices of the Congressional leaders, cabinet officers, and the President of the United States.

On June 23, 1940, Congress passed Act P.L. 668, providing \$15,000,000 for vocational training of less than college grade in

occupations essential to national defense. This was only a part of the original sum of \$63,000,000 requested by a representative group of the educational leaders of the nation. It appears that the entire fund will be consumed by November 1.

## Pennsylvania Retraining Act

Pennsylvania had State retraining acts for a period of five years preceding the passage of this Federal Act, under which training programs were conducted and unemployed men were retrained for new occupations. Adjustments were made in the Pennsylvania State office so that under the State retraining act the State underwrote a large national defense training program and started that program as of July 1. In seven days after the passage of the Federal Defense Training Act, Pennsylvania had 6,000 men in training in the trade schools of the Commonwealth. This number was more than doubled by the end of the summer.

Many of the trade schools of Pennsylvania are operating on two and three shifts of eight hours each. Trade schools are in session eight hours a day, five days a week. As soon as students are able to do productive work and have adequate skill they are placed in private industry and their stations in school shops are filled with new enrollees.

Lafayette College was the first college in Pennsylvania to make its engineering shops available for the training of tradesmen. This program is being conducted under the direction of the city schools of Easton.

The city schools of Pittsburgh have arranged with Carnegie Institute of Tech-

nology to use the welding facilities of that institution. It is entirely probable that additional private school and college equipment may be used in this training program if such programs operate through the public school authorities.

Students for these classes are requisitioned from the Works Progress Administration. The specifications were written by the school people. Persons on relief, with certain mechanical background and ability, are given preference in the training schools. The Government apparently cannot well afford defense programs and an unnecessarily high relief program at the same time. The schoolmen of the nation responded to this process of securing enrollments even though difficult to organize especially since time is an important factor. Substantial numbers of persons from relief rolls were selected and trained for jobs essential to national defense. Other persons with considerable mechanical skills were also enrolled in what was known as "Refresher" courses. Many men employed in industry also enrolled in a trade extension class for instruction supplementary to their daily employment.

#### **Job Mobilization in Pennsylvania**

Governor James, during the early part of 1940, organized a committee on Job Mobilization under the direction of Walter D. Fuller, President of the Curtis Publishing Company. This committee encouraged industry to take men from relief rolls and place them in private employment. It appears that almost every request made by this committee was met with the same statement. Industrial leaders stated that to promote men to higher positions and to bring men in on the lower employment levels called for training all along the line. The work of this committee was most successful and among other things emphasized the need for trained men. The results of

the committee's work, and the State retraining program, prepared the way for the vocational education national defense training program in the Commonwealth.

#### **Need for Retraining**

Industry makes every attempt to keep the best-trained men as long as possible. Even so, many skilled men were unfortunate, lost their jobs and were on relief. Others were partially trained or skilled. For the most part, these men can be trained for special jobs in industry in a relatively short period of time.

It should be kept in mind that not all these men are well-rounded machinists. They are specialized machine-tool operators. Many will continue to enroll in trade extension classes until they become full-fledged journeymen mechanics. Classes are therefore established for two groups—one the pre-employment "Refresher" courses and the other the trade extension courses for employed men.

Generally speaking, training programs are set up to meet local training needs. Each school offering a defense training program is requested to have an advisory committee which can estimate the probable employment need in industry in the local vicinity.

However, some schools have specifically trained men for jobs at distant points. Williamsport, Hershey and Pittsburgh, under the State retraining act, trained substantial numbers of local men for positions in the Glenn L. Martin Aircraft Company at Baltimore, Maryland. Trevorton trained men for skilled jobs in Berwick, Milton and Philadelphia. The public schools at Lansford, Mahanoy City, Shenandoah and Selinsgrove have taken over industries in their local communities and are using these industrial facilities for the training of men for jobs at distant points. In localities where unemployment percentages are high,



and the possibility of new industries locating there remote, men are being trained for jobs elsewhere.

All students enrolled in the national defense vocational education training classes are registered with the State Employment Office and all placements are cleared through that office. The success of the program will be measured largely by the successful placement of these men upon the completion of the training period.

One trade school had a request for 800 men by September 1, and another request was received by this same school for 500 men to be employed at a plant 40 miles away.

Placement in the day trade schools has always been relatively high. Of the several trade schools reviewing the relief rolls in their areas, not any of them found their graduates on relief during the depression years.

A modern, highly mechanized war can be very readily lost for lack of trained mechanics in the machine shops of America.

Large numbers of men, formerly employed along mechanical lines in the closed mines of Pennsylvania, formerly working as repairmen on power machines of the textile industries which moved south, are being trained for the metal trades and ship gear industries. Unemployed men in more than 50 centers throughout the Commonwealth are being removed from relief rolls, trained and placed in gainful employment in private industry. Pennsylvania has sufficient men trained or being trained now, to meet the demands of industry.

The school shops of America responded "Blitz" style to a patriotic call. Several hundred thousand men will be trained in these school shops this year. The school shops have demonstrated that they are "Ready Now" to serve.

## THE WILLIAMSPORT PLAN

A. M. WEAVER

*Superintendent of Schools  
Williamsport, Pa.*

That man who through technological changes or through other causes within or without his control, finds himself continuously out of employment is an ill man. He is suffering from a disease which if unchecked will destroy his economic and social value to civilization just as surely as a malignant anatomical disease will destroy his body. The Williamsport plan is a community endeavor to arrest the progress of the disease called unemployment.

The plan uses no new formula. It is merely the application of well-tried and standard techniques known to vocational educators for a generation. If this community can lay claim to any novel contribution, its contribution lies in a persistent and determined effort by its leaders to make these techniques work. Those who are familiar with the principles of occupational education will recognize the importance of the following precepts.

In the first place the public school system today is charged with the responsibility of occupational education of its people, and this trend necessitates the fullest cooperation of all community forces and enlists the support of such agencies as the Civilian Conservation Corps, National Youth Administration, Works Progress Administration, Department of Public Assistance, and Public Employment Service if it is to be fully successful. About 70% of the unemployed are unskilled and unequipped by training and experience for the job opportunities which seem to be on hand. About 85% of these unskilled clients possess sufficient background, education and inherent ability to do skilled and semi-skilled work, and can be placed on private jobs within a short time if they are retrained.

That these men and women are quick to avail themselves of the opportunities that are offered under this program is evidenced by the eagerness with which they apply for admission to the courses offered, and the zest with which they apply themselves after they are enrolled as students.

By various means these out-of-school and unemployed youths are brought within the sphere of influence of the school. The prospective trainee is frequently referred by one of the cooperating agencies and instructed to report for an interview with a coordinator whose purpose it is to seek to discover the program best fitted to the needs of the individual. Other young men and women who have left school or who for various reasons do not care to attend day school classes are referred to the Junior Coordinator. Diagnosis of the individual problems is made through a man-to-man contact, known locally as the "Dutch Uncle" method. All pertinent information concerning the unemployed man or woman is made available to a practical and skilled school staff and thus becomes the subject of informal and personal study. However, the school proposes to get the applicant a job, not to write a case history, and therefore, although some of the data are recorded on file cards, no attempt is made to make a complete scientific analysis. Consequently, records are few and simple. Every effort is made to establish intimate and friendly associations and thus we have an informal and yet practical way to secure any needed information. In cases where the more homely methods do not suffice, various psychological tests are made to facilitate an early and definite diagnosis. These tests among other things help to determine in

what direction a subject's interests lie (since the school trains for a score or more occupations) and so form a basis for placing him in the field in which he has a strong vocational aptitude. However, it is not always possible to place an individual in the exact occupation which is indicated for the practical reason that job opportunities do not always correspond, and the real objective is a job.

Based on the findings and diagnosis of each individual case a training or retraining program is begun. This program is sometimes merely the vehicle upon which a client is carried while personality defects are studied. In other words the subject may be placed in a program for the purpose of observing his work habits and to make a survey of his ability to work successfully with others as well as for others. In other cases it is merely a "brushing up" process. New fields are never sought if an old experience can serve as a foundation and it is unusual to find a case where some previous training or experience does not exist.

The placement step begins as soon as the training has progressed to the point where the individual has acquired the work habits and skills required for a place on a private payroll. Of course the speed of placement varies with the individual and with the industrial needs of the community. The instructor is always a man or woman who

has superior skill and ability to work with men and women as well as one who has many contacts with employers, foremen and workers. Thus he is acquainted with the needs of local industry and is able to maintain a comprehensive survey of job opportunities. In this step the services of the State Employment Service are very helpful. Placement is the point toward which all of the foregoing effort has been leading and the benefit to employer as well as to employee is readily recognizable when it is understood that in ten years of operation the Retraining School has rehabilitated and placed on private payrolls about 4,000 individuals.

A great section of the community population has at one time or another received service from the school. In the dark days of their careers large numbers of men and women have benefited greatly from the willing and helpful cooperation of this school and in following its plan young people have been encouraged to prepare themselves for employment, and have, thereby, bettered their economic situation. The result is more employable men and women and more constructive citizens. It is small wonder, then, that the Williamsport plan enjoys the approval, gratitude and support of its people.

# OPPORTUNITIES TOMORROW

## A Scientific Method of Crystal Gazing

EGBERT H. VAN DELDEN

Assistant Professor of Management  
New York University

There is a wealth of meaning contained in the motto of the Pennsylvania Association of School and College Placement. To function as a placement officer, it is essential to keep informed concerning "new opportunities now." Sometimes, however, in order that the "persistence" of an applicant may ultimately result in "achievement" and "self-reliance," it is important to know of opportunities tomorrow.

A placement officer must be, above all else, a realist. Educators may talk glibly of functionalized training but the placement officer knows that, practically speaking, transfers between industries is likely to be possible only during the first five years and sometimes not even then. Theoretically, but not practically, an accountant, a salesman, or a factory manager can become unemployed after ten years of employment in one specialized industry and obtain employment in an entirely different field. His training has been functionalized, but his experience, unfortunately, has not. The actual fact is that his habit routines have become so specialized that he is disqualified from an employment standpoint for work in any but a closely allied industry.

It is not enough, therefore, that a student determine the occupation for which he is best fitted; he should also select carefully the industry with which he will be most happily identified all his life. Compare the advancement potentialities of a young man, regardless of occupation, who is starting out at the present time in the transportation industry, if he selects railroads instead of automotive or air travel and freight; in the tobacco industry if he selects cigars instead of cigarettes; in the textile industry if he

selects woollens instead of rayon; in the communications field, if he selects telephone instead of radio; and so on down the list. It is not enough to say "there is always room at the top" or that "a good man will find his own place"; the placement man knows that not all applicants are good, and that even those who are would achieve greater success if impelled by the impetus of an expanding industry.

There is a social and economic responsibility in guidance and placement that those engaged in the profession cannot avoid. The amount of misinformation current concerning which industries are expanding and which are contracting is appalling. A "must" for the placement office library should be such books as *Technological Trends and National Policy*, prepared by the National Resources Committee and published by the United States Government Printing Office, and *New Horizons for Industry*, prepared and published by the General Motors Corporation.

Also essential on the part of those in educational placement work is the ability to estimate future employment opportunities. Most of us are familiar with the forecasting methods used in industry and the degree of success that has been achieved. While many sceptics still remain, it is now almost universally accepted that better estimates of the future can be made by the use of forecasting methods than by using none at all. The forecasting of employment constitutes three interrelated problems: 1) to estimate employment in an industry; 2) to estimate employment in an occupation; and 3) to estimate employment in a community.



The author recently completed a study of the 40 industries in the United States which in 1935 employed the greatest number of workers. Taken as a group, 56% of the total value of industrial products and 60% of the wage earners in industry were represented. Data for these industries were obtained from 1879 to 1937 from the United States Census of Manufactures. The dollar volume of production of each industry was adjusted to eliminate fluctuations in the value of the dollar. When the ratios between these adjusted data and employment were computed and charted, a linear relationship became evident for each industry.

It is ordinarily possible to obtain an unknown—such as employment—from a known, if a linear relationship exists. An abundance of data is available concerning dollar volume of sales and production, inasmuch as forecasts of sales and production are made for various industries by individual companies, trade associations, commercial services, universities and government bureaus. Having these dollar forecasts, it should be possible to compute estimates of employment by means of the determined relationship.

A placement officer, for example, is informed that a contract for a certain number of dollars has been signed in a war preparedness industry. He wishes to determine how many jobs will result therefrom. The trend line of the ratios for that industry is projected; the present dollar is adjusted to dollars of constant value, and the estimated number of potential workers is obtained therefrom. For those who are mathematically inclined, the basis formula is  $E_e = a + bx \frac{VP_e}{10^i}$ .  $E_e$  represents the estimate of employment sought,  $VP_e$  the forecast of value of production,  $i$  is the index figure of the Index of Wholesale Prices of

the United States Bureau of Labor Statistics, and  $a + bx$  is the formula for fitting a trend line by the Method of Least Squares.

The next problem is the determination of opportunities in a specific occupation. This can be accomplished by using Census of Population data relating to occupations as a basis for determining the percentage of employment of the industry which is accountable to this occupation. A study of the trend of the relationship between employment of various occupations and the whole should enable an even closer prediction. With the estimated total employment for an industry, and the percentage of total employment usual to this specific occupation, the estimate for this occupation should be fairly accurate if no important labor-saving improvements are in the offing. It is part of a placement officer's job to know of such impending changes.

The third problem is the determination of employment possibilities in a community. This could be undertaken by the analysis of tables of manufacturing activity in the United States by regions, states, and counties contained in the Industrial Market Data Handbook prepared by the United States Department of Commerce. The data relating to the proportion of all manufacturing activities in the United States by regions and states should facilitate a quick estimate of employment possibilities in any industry within a similar area, when the basis relationships are once determined. An analysis of the detailed county tables and the synthesis of such information should make possible an investigation of the possibility of building up a prospectus of employment opportunities in a county or local area.

It is recognized that placement officers are perpetually busy people and that not all of them are mathematically inclined. The United States Bureau of Labor Statistics

(Continued on page 60)

## EDUCATION THROUGH WORK EXPERIENCE

What the National Youth Administration is and is not

WALTER S. COWING

*State Youth Administrator  
Commonwealth of Pennsylvania*

For clearance and understanding cooperation, it may be well to state what the National Youth Administration is not, as well as what it is.

In some states there have been criticisms of the National Youth Administration by those who confuse our organization with that of the Youth Congress. I quote an editorial from a western paper:

"There is no connection between the two. One is a national organization made up of youths avowedly intent upon doing something in the line of government.

"The National Youth Administration, however, is a government agency, built solely for the benefit of young men and women in need of definite work of a constructive nature."

The National Youth Administration is a part of the Social Security Agency, bracketed with the U. S. Office of Education and the Civilian Conservation Corps, agencies that relate to education and the conservation of youth.

We are in no way officially connected with the Youth Congress and they have nothing to do with National Youth Administration policies or direction. We will confer with and help any and all organizations of and for youth, but we are not responsible for their actions as organizations.

We receive letters of earnest inquiry asking whether we are indeed a communistic organization. I believe N.Y.A. has been able in every case to refute this subtle and dangerous allegation though, of course, no organization can be free from suspect particularly at this critical time.

Not in the slightest sense is the National Youth Administration a communistic organization nor have we ever been. We are neither red, pink, nor black, and our services are for all youth without regard to race, color, creed or politics. Under the terms of the N.Y.A. Appropriation Act, the oath of allegiance is required of all employees, including youth employees paid from funds appropriated to this Administration for the fiscal year 1941.

Another and very excellent organization sometimes confused with the National Youth Administration, is the American Youth Commission. The American Youth Commission is a group of leading American citizens, headed by Mr. Owen D. Young and other nationally prominent leaders—a survey group who have made and are making an analysis of the needs of youth. They have accomplished an outstanding and enduring service, recognized and applauded by all who know of their work.

The American Youth Commission has no official connection with the National Youth Administration though they have assisted us with their findings and we have assisted, and will assist, them on every possible occasion.

And now a brief picture of the National Youth Administration.

### Purpose

The National Youth Administration was created to find a solution or a partial solution for these four shortcomings in our social and economic life.

1. There are not jobs enough to take care of the youth who need and want jobs.
2. Our Educational System is not adequate in size or character nor its curriculum in many cases fitted to prepare multitudes of youth for work opportunities that are available. "Non-existent white collar jobs are the goals for which the majority of secondary schools prepare these pupils." (See *School and Society*, August 24, 1940 Issue.)
3. Nationally speaking, there is not equal opportunity for education. In vast areas there are not enough free schools to care for the youth population, and children are too poor to attend free schools and colleges even where they exist.
4. There is a gap, measured in years, between the time a youth leaves school and the time he finds a job. During this period, society seemingly abandons him. Most of our criminals are to be found in this social "no man's land."

In this service Pennsylvania has had the understanding support and cooperation of 1,220 secondary schools and 88 colleges. Pittsburgh, under the leadership of Dr. Ben G. Graham, Superintendent of Schools, is accomplishing an outstanding pioneer service in meeting the needs of out-of-school youth. (See Report of the Cooperative Efforts of the National Youth Administration and the Pittsburgh Schools.)

During a year's time nearly 100,000 youth are reached, influenced and helped through the National Youth Administration Program in Pennsylvania and 780,000 throughout the Nation. That total includes the Student Work Program of assistance to high school and college youth and our out-of-school, part-time work experience program for out-of-school, unemployed youth. Interwoven in this effort is the Employment, Training and Guidance Program which

tries to reach and assist every youth. The objectives of N.Y.A. should be kept in mind in any process of evaluation. Reference to many statements of leaders and of impartial surveys indicate that basically the objectives of N.Y.A. are the installation into youth of those qualities that make for good citizenship. Some of those qualities, such as social attitudes, educational advancement, cultural appreciation, etc., are intangible and difficult to measure. Others are tangible, such as the acquiring of good working habits through actual work experience, thus enabling one to earn a living. N.Y.A. does not and cannot teach skills nor give adequate specialized training. Its program does give work experience and it does discover aptitudes in skills.

Over 50,000 Pennsylvania youth are now actively identified with our program in Pennsylvania and in addition there are over 30,000 more youth already certified and ready for part-time employment on N.Y.A. projects as soon as money is made available for that purpose. Unfortunately, this is but a "drop in the bucket." There are over 200,000 other youth whom we cannot aid at present.

### Accomplishments

There are five outstanding accomplishments that might be credited to the National Youth Administration.

1. The National Youth Administration has made an excellent start toward filling the gap between leaving school and finding a job.
2. A new technique in education is being developed; that is, education through work. The inclusion of related studies to actual work on a project has been an outstanding success.
3. The exceptionally large number of youth trained on N.Y.A. who, after brief periods of combined work and education, have been able to find em-

ployment in private industry. These thousands increase in number with expanding shop and educational facilities.

4. Unemployed youth can be given much socially useful work within the various communities. This enriches the community as well as the lives of erstwhile unemployed youth.
5. From the first set up in 1935 with 50 millions of dollars earmarked for its use, to the last appropriation of 100 millions, the average administrative overhead of the National Youth Administration has been less than 5% and in Pennsylvania less than 3%.

Perhaps the most important step forward since the organization of the National Youth Administration in 1935 is the recent cooperative agreement entered into by the U. S. Commissioner of Education, Dr. J. W. Studebaker, and Aubrey Williams, National Youth Administrator. Facing this realistic and increasingly imminent dual responsibility, the Superintendent of Public Instruction, Dr. Francis B. Haas, and the State Youth Administrator, with appointed committees are giving earnest and active cooperation.

Where related training or any so-called educational training is contemplated, i.e. training in non-paid activities, the N.Y.A. is instructed to advise with the Department of Public Instruction concerning plans and program. The Department of Public Instruction assumes responsibility for related training and the supervision of training. N.Y.A. continues to be responsible for production and all part-time work as well as work experience apart from related training.

An interpretation of the relationship between the National Youth Administration and School Authorities with respect to work activities and related training follow:

1. The term "state school authority" refers to the school officer designated

by the U. S. Commissioner of Education.

2. Under this agreement, the schools shall be responsible for all training provided for youth employed upon N.Y.A. projects. In any cases where schools cannot provide the necessary training, there shall be an agreement between the representatives of the National Youth Administration and the designated school authority as to the manner in which any necessary training will be supplied under such circumstances.
3. Accordingly, each State Youth Administrator shall limit his activities, insofar as project prosecution is concerned, to productive work for youth employed on the program. Necessary direction in the performance of productive work, may be provided by the National Youth Administration as an integral part of getting the job done. Training which otherwise would be provided by the schools may be given by the National Youth Administration only where an agreement has been reached with the designated school authority.
4. The agreement provides for consultation between the state representatives of the National Youth Administration and the designated state school authority on the prosecution of N.Y.A. work project activities in such manner as to facilitate the provision of training by the appropriate educational institutions and for the establishment of committees to settle any disagreement concerning the provision of training.
5. In order that arrangements may be made by the school authorities to provide necessary training, State Youth Administrators are instructed to consult with the designated school authorities with respect to the present program of work, as well as with respect



to proposed work activities. This does not require that school authorities assume any responsibility for the continuance or discontinuance of any N.Y.A. work project, but is intended to provide an arrangement whereby mutual understanding may be reached between the National Youth Administration and the school authorities with respect to the nature and character of the work activities undertaken, as well as the training to be provided by the schools.

6. This agreement shall not be interpreted to prevent the operation of training programs which are now or may be set up with colleges or other recognized educational institutions not administered by the designated state school authority. Problems arising over such arrangements should be referred immediately to the national office.

The measure of value in this justly cooperative effort will depend largely upon mutual understanding and coordination and upon necessary additional funds asked for by the Office of Education for the prosecution of the new related training program.

#### **Physical Accomplishments of N.Y.A. in Pennsylvania**

Statistics and detailed figures are difficult to visualize. Suppose we, in our imagination, visualize N.Y.A.'s physical accomplishments by collecting our out-of-school, part-time workers in one place. A city of their own building. In this astonishing picture please remember that workers on the Student Work Program in schools and colleges would comprise another city of itself, larger by 8,000 youth than the one we are now to visit and a work vitally important and of enduring accomplishment.

"N.Y.A. City" would be the name of a mythical Pennsylvania town peopled by

part-time youth workers on the National Youth Administration Out-of-School Work Program who, were they grouped together in one place, would represent a community with a population of over 22,000.

There would be 36 youth centers and other community buildings in this city on which N.Y.A. citizens would have worked, as well as 33 park, social, and other recreational structures. "N.Y.A. City" would have an outstanding conservation museum, high school auditorium, observation decks, children's playgrounds, park shelters, etc.

With the work these "citizens" of "N.Y.A. City" accomplished in one year, their own town would be located on 607 acres of completely landscaped grounds with over 330 acres of improved park and public property on which would be planted a total of 259,000 trees and shrubs. The "citizens" would be able to find recreation in 72 playgrounds they constructed and on which they installed 3,208 pieces of recreational equipment. They could witness baseball and football games on 67 athletic fields and athletes could use facilities of numerous field houses.

In "N.Y.A. City's" parks and playgrounds there would be 103 tennis courts, 93 fireplaces, and nine swimming and wading pools, as well as horseshoe, volley ball and basket ball courts. Around many of these plots would be a total of 34,196 feet of fence. Much of this fencing would be used to guard bird and game sanctuaries. The streams in and nearby "NYA City" would have 31 storage or check dams and 7,090 feet of banks and stream beds improved. Along the banks would be also 3,766 feet of retaining walls or levees and 11 bridges would cross the smaller streams.

Four large lakes would be located in the city suitable for boating and fishing in the summer and skating in the winter. Several ski jumps, toboggan slides, and other winter sport facilities would be found.

"NYA City" would have over 250,000 linear feet of roads, streets, sidewalks, foot-paths, and trails of which 4,000 feet would be completely landscaped. These would be properly identified with 10,000 markers made by citizens of "NYA City."

Woodworking, sewing and metal shops in "NYA City" would cover an area of 75,000 square feet or one and a half acres. Under the defense program in which N.Y.A. is prominently identified these shops would be doubled in number and capacity. In these shops equipment and furniture for use in schools, hospitals and other public buildings and public facilities would be made. In these, as well as metal, machine, and auto shops, "NYA City" people would make and repair various types of public automotive and other equipment and aviation equipment, radio transmission and floating plane docks. Thousands of youth would be prepared through work experience to administer first aid or to transmit and receive messages in the Morse Code.

The city would contain seven resident work centers, four for boys and three for girls, wherein young people living in dormitories together could work, earn, and learn in a cooperative society.

Over 233,000 hot lunches would be served to pupils in "NYA City" schools and 195,000 visual education aids would be

made for use in elementary grades. Public libraries in "NYA City" would contain over 293,000 books which would be repaired or renovated.

For the underprivileged in this mythical community over 91,000 articles of clothing, bedding, and household items would be made and 31,000 toys renovated for children. Hospitals would have hundreds of workers in all departments and would receive thousands of pieces of surgical supplies made on special projects. The part-time youth would be paid from \$18.00 to \$24.00 per month for 60 hours of productive work and would be expected, when available, to give an equal number of hours in related or citizenship training.

"NYA City" would have several symphony orchestras, several bands, dance orchestras, and other music groups and would sponsor and present regular radio programs and community events.

It would contain thousands of young men and women, who before they became part of the "NYA City," were discouraged, cynical and in great financial and physical need. They now represent, in the main, a happy, ambitious, "chin up," forward looking group of future citizens who, one day, must take our places and do a better job than we have done.

## SPARE HOURS TO SELL

### A Review of Student Self-Support

CLARENCE E. LOVEJOY†

*Executive Secretary, Alumni Federation  
Columbia University*

"Madam," thousands of boys have said while standing on a housewife's doorstep, "I am working my way through college." They were selling magazine subscriptions.

Many a mother and nearly everybody's grandmother have had that speech made to them. It was a tear-jerking, heart throbbing and usually true statement except sometimes when professional panhandlers tried to pose as collegians.

Hundreds of thousands, perhaps well over a million, have worked their way through college and thrived on it. The boy and girl of today says, "That means me," and parents agree. It would be hard to walk along the main street of any town without passing someone who worked his way through college. It is as American as chewing gum.

Let's put the spot-light on this collegiate practice that has become so important and wide-spread since that October day of 1929 when the current depression started that they have begun to coin words describing it: *bookjack*, *colloperate*, *educraft*, *edwin*, *schurge* and *tuitionale*. Working one's way through college has become in the aggregate big business. A few years ago federal tabulations found that self-help students had earnings in excess of \$32,500,000 annually. At least half the students in American colleges and universities are doing it. In some institutions, such as the compulsory work-and-study types of Berea and Park, 100% of the students are doing it. They don't care who you are, rich or poor, you must work your way.

Basically, there is nothing especially new or novel about working one's way through

college. Nearly 300 years ago Harvard had its Zechariah Brigden, who in 1654 earned twenty-two shillings, sixpence, "by ringinge the bell and waytinge." Other early Harvard students earned money "waytinge in the Hall." They brought viands from the kitchen hatch and beer from the buttery hatch. They washed trenchers; they helped the college tinker. In the Harvard Class of 1821 Ralph Waldo Emerson had the post of "president's freshman," a petty office created for poor boys by President John Thornton Kirkland who had them assigned to living quarters under his office. New and different jobs have been created in colleges over the years. The Amherst of 1864 had a boarding house patronized largely by Alpha Delta Phi where the landlady normally charged \$3 a week for meals but gave one student free food because he said grace and did the carving of the roasts and joints.

Men don't lose face in college because they work their way. The college man of 1940 feels that if working one's way on a campus was good enough for Herbert Hoover, Nicholas Murray Butler, Harold Stassen, Albert J. Beveridge, William O. Douglas, George Horace Gallup, Floyd B. Odium, James D. Mooney, Paul V. McNutt, *et al*, it is good enough for him.

Education is the important thing and means to the end only incidental. Observe, please, the significant studies by the American Youth Commission formed by the American Council on Education. "Give Youth a Chance" is the cry, and the Commission is impressed with the experiments combining schooling and employment. Throughout the nation they are beginning

†Author of "So You're Going to College" (Simon and Schuster, 1940) and originator of "The Lovejoy College-Rating Guide."

to spell Youth with an upper case Y. It's great to be young today. Boys and girls are more important than ever. It is a perishable commodity, Youth. Governmental, educational and fraternal organizations of all kinds are salaaming in front of Youth.

Working for an education is a form of barter. There is nothing abhorrent or revolutionary in educational barter. Three centuries ago many a colonial New Englander, finding the cost of attending Harvard prohibitive, took advantage of the college laws of 1655. They specified that, instead of money, students pay for part of their fees with barrels of salt beef, butter in casks and firkins, wax, tallow, wether goats, indian corn, "cattell" and "flower."

Barter is still a good American custom in the colleges. What's wrong with swapping a little dish washing or library service or any other kind of a job on or off the campus with a chance to achieve an education and earn \$72,000!

What \$72,000? Why, that's the additional income the college graduate at the age of sixty will have earned over the lad who quit studying after high school. Dean Everett W. Lord of Boston University and others have compiled such statistics. By dividing \$72,000 into four, it means that a college year is worth \$18,000. Who wouldn't work for that kind of money, even if it means getting finger nails dirty, even if it means flexing muscles until they ache?

Self-support at college doesn't only mean holding a part-time job, whether that job be white-collar or old-shirt. When parents are unable financially to pay the entire sheaf of college bills, students know there are at least three types of student aid—jobs, scholarships and loans. Frequently a needy student will utilize all three. Desirable jobs are likely to go to deserving scholarship students; and if scholarships do not continue into the senior class year,

because of the professional option curriculum which many colleges have, these same students who have proved their worth-whileness to the college administrative officers are preferred risks in the allocation of student loan funds.

The genuine unstinted thanks of thousands of parents and thousands of their daughters and sons ought to go out to the personnel and placement officers of the modern American colleges. I don't mean the haphazard placement officer of twenty-five years ago. I mean the keen, alert, energetic, scientific executive of 1940 who has by his zeal and ingenuity built up his post into one of the most conspicuous administrative offices on the campus.

Only a handful of backsliding, pokey old colleges, most of which are teetering anyway and are going to collapse or consolidate during the next decade because there are too many colleges and the poorer ones must go, still look on part-time student employment as an irritating nuisance. These are likely to be the colleges that are one-building, always-impooverished, overgrown academies with poor, misfit faculties, miserable book collections called libraries and rusty collections of plumbing called laboratories. They expect a stenographer in a dean's office to handle the routine of employment in between her dictation. Or perhaps they expect some local clergyman or the corner pharmacist to be on the lookout for an occasional job opening for students. They haven't changed their methods over the years. Many alumni can look back on college days and find much to criticize in the then existing employment offices. Perhaps a part-time graduate student gave, almost grudgingly, a couple of hours a day posting applications on a bulletin board in a perfunctory sort of way, trusting that by mere luck needy students would get an occasional picayunish job. Those bureau



managers must have thought it was undignified to try to stir up openings even when they knew of boys who needed them badly because they weren't eating regularly.

Now the manager spends much of his time calling on employers, alumni and others, creating vacancies, trying to make two jobs grow where there was only one last year. He has systematized his office and staff so that by skillfully devised blank forms he can see at a glance the type of job applicant on his roster and can match him up with the job opening. He delegates most of the routine to assistants while he himself goes out pulling doorbells and selling his college men and women. If not a science, college job-getting is at least an art.

And why shouldn't it be? Colleges have become stream-lined. Their presidents, deans, professors and personnel officers know how to help students. Many of these same administrators worked their own ways for their educations. In up-to-date institutions they say to themselves something like this: "If we accept poor boys because they have promising minds, and if we know full well that they don't have money enough for four years of college, then it is up to us to try our hardest to find them jobs as well as scholarships and other aids." They go further: "When we get good students by our selective admissions procedure, we cannot afford to have those good students quitting college because of financial inability to continue. We cannot afford to have the country flooded with our non-grads for fear educators elsewhere, parents, business and professional men will begin to think our college doesn't amount to much."

And so you will find on most self-respecting campuses an alert man or woman in charge of student employment, perhaps several men and women, maintaining an efficient, business-like personnel office, with interview rooms, card files, bulletin boards and full facilities. Sometimes it will be a

major college officer, called "Director of Placements" or "Secretary of Appointments" or "Dean of Students." In most first-class university employment offices the finding of undergraduate part-time jobs is only one phase of the routine. They handle placements for the graduating class, and for alumni, including law clerkships, medical internships, and registering of teachers for permanent or temporary positions. Frequently employment offices are adjuncts of the college's alumni office. In many an institution pressure from the organized alumni association has brought about the establishment of the modern employment bureau.

We wonder why supervising student employment was so long submerged in the functioning of a college. Industry learned about the importance of personnel work years earlier. Colleges are just waking up to the fact that if they have \$1,000,000 budgets or \$5,000,000 budgets—I know one that has a budget of approximately \$12,000,000—they should act like businesses trusted with such enormous operating sums. The personnel and placement departments are really the sales executives, selling not cigarettes or breakfast food, but selling college-trained human beings. If a tobacco company had a \$12,000,000 budget, it would spend a good sized chunk of it on a sales department. College presidents and trustees are learning the wisdom of this.

Running a college is a big business. It is going to be harder in the face of the reduced birth rate that is now reflected in secondary school enrollments and about 1945 will give college officers even greater concern. In one year recently the total expenditures for education in the continental United States, not including commercial or correspondence schools, were nearly three billion dollars. The exact figure was \$2,968,010,400. Of this, 18% or \$543,855,466 went for col-

leges, universities and teachers colleges. Four years ago the Office of Education found of 1,362 institutions that grounds were worth \$334,085,387, buildings worth \$1,636,722,004.

Higher education figures are staggering. Fraternity houses throughout the country cost \$90,000,000. The Carnegie Corporation estimates that \$50,000,000 is being spent annually on research in American universities. It is estimated that 70,000 students hold scholarships valued at more than \$10,000,000 annually and that if loans for all institutions in a single year are added, the sum of \$90,360,284 is found to be available for student aid, 15% available in publicly controlled institutions, and 85% in the private and denominational colleges. More than 100,000 students are benefiting by the co-operative make-your-own-bed dormitories and the wash-your-own-dishes dining halls.

No important college or university, even the municipal and state institutions, benefiting by taxation and legislative appropriations, offers education without cost to the student. Even when tuition is alleged to be free, there are invariably fees and charges under various names that must be paid. No wonder boys and girls from the cities and the farms who come from depression-affected families must sell their spare hours both during term-time and during summer vacations to win that education they are courageous enough to seek. The figures accepted generally that some 50% of college men and 30% of college women are earning part or all of their expenses are rising noticeably.

The University of Washington had a recent year when 4,025 men or 72.3% were partially or entirely self-supporting. One year the University of Wisconsin had 5,283 men or almost 60% working, some 16% of them entirely self-supporting and 19% earning more than half of their expenses.

The number at Wisconsin has been as high as 72% self-supporting wholly or in part, and 23% wholly. The University of Maine found in a survey that 79% of all undergraduates worked, with average earnings of \$146 for summer jobs and \$140 during the college year.

Part-time work is not confined to the large urban and state universities. The "country club colleges" have similar percentages. The depression is no respecter of the "station wagon set." In 1939 Williams College reported more loans than in any previous year. Many boys who had not sought it before asked for term-time employment. Seventeen per cent of the scholarship boys were sons of Williams men. Most of those fathers must have been richer once. Among the fraternities Kappa Alpha had 13 working, Psi Upsilon 10, Delta Psi 13, Delta Phi 10, Beta Theta Pi 11, Alpha Delta Phi and Delta Kappa Epsilon eight each.

In 1939 at Princeton students reported earnings of \$150,649.64 during term-time and another \$38,457.40 during vacations. No one knows the amount of unreported earnings. Dartmouth has students benefiting by \$220,000 worth of scholarships, grants, loans and jobs in a single year, about \$50,000 owing to jobs directly under the control of the college. Harvard students reported earnings of \$288,085 in 1938, almost two-thirds of it from part-time jobs outside the university. Two thousand Harvard students annually seek work. The average earnings for students placed through the central office are \$185 for term-time jobs and \$200 for summers. Out of every 100 term-time workers, five earn more than \$400, 34 from \$200 to \$400, 20 from \$100 to \$200 and 40 earn less than \$100. Vassar's figures for several recent years show working girls, including those in the co-operative houses, earned averages of \$106.00 during the academic year and \$75.65 during the

summers. In some large institutions the number of workers is astonishing. Robert Foster Moore, the Columbia University Appointments Secretary, estimated the 1938-39 employment activity at more than \$1,000,000, earned by 6,840 students at part-time work, and by recent graduates who had obtained placements. There were 15,647 applicants in his office files; 8,547 positions were referred to the office and 14,964 interviews were arranged.

The University of Chicago supervises the assignment of more than 4,000 jobs each year. The University of Southern California interviews in its Bureau of Employment more than 1,400 persons each month. In a recent year Minnesota students earned \$85,278, with 2,666 men and 630 women students landing jobs. Union College reported 500 of 832 students working for part or all of their expenses. Rutgers students one year earned \$112,013. Smith had 500 girls earning varying amounts.

Every college in the land has equivalent stories to tell of its self-help students, differing only in amounts because of varying size and location. There are 17,452 different kinds of jobs in the United States and college men and women have learned to hold scores of them. Dr. C. E. Clewell's extraordinarily efficient University of Pennsylvania Placement Bureau tabulated in a recent year 74 different occupational headings for its working students. I mentioned this in a recent NBC broadcast one morning when Nancy Craig interviewed me about my new book, "So You're Going to College," and the interest aroused among listening parents and prospective college students was so unusual that Miss Craig prepared and distributed an itemization of these 74 University of Pennsylvania student jobs.

Many of the jobs are as old as colleges themselves. There will always be waiting on table, for instance. But if there is any definite trend at all in colleges, it is probably the expansion of student agencies and the enlargement of the working-scholarship schemes. Both are advantageous to undergraduates. Both are departures from the old per-hour and per-day labor. Men and women would rather work with their brains, especially in fields of effort that will help them professionally and supplement their college work in preparing for their careers. Obviously, the agency manager, who can earn up to \$1,800 a year running a student laundry or other campus concession, learns more about business enterprise, finance, banking, how to handle money, how to handle men, how to sell and make a margin, how to prepare financial reports, than the chap who is a "pearl diver" in a dining-hall kitchen.

The man at Harvard, under the Temporary Student Employment Plan, or the man at Yale under the Bursary Plan, is going to be a better librarian, or museum curator, because of his head-work, as contrasted to hand-work, in the made jobs that Harvard's annual \$40,000 plan provides. These jobs, and there is a growing number of similar ones at other institutions, beat mowing lawns for twenty-five cents an hour, slinging hash for meals or minding faculty babies and wiping noses while the prof and his lady go out to a concert.

It is hardly possible to go from Puget Sound across the land to Biscayne Bay without being in hearing of college yells and in sight of ivy walls all the way. On each of those countless campuses young American men and women are selling spare hours for their education—and they are proud to do it.

## JUNIOR ACHIEVEMENT

J. BLAIR EASTER

*Executive Director*

*Pittsburgh Junior Achievement, Inc.*

The letter on the opposite page was written by a lad in one of the Junior Achievement companies, and it conveys better than anything else what is being acquired by the young men and women who are being benefited by this movement.

There are in America approximately 4,000,000 boys and girls between the ages of 16 and 24, who are unemployed. These four million have completed their academic training; they have had the advantages of the best educational system in the world today, and facilities were available to them for specialized training such as they desired.

Why, then, are these four millions unable to find employment for themselves? They lack the experience of having converted their academic knowledge into practical applied activities. And because general conditions of unemployment among their elders have prevailed for a number of years past, industry has not given them the opportunity of gaining this experience for themselves.

A condition of unrest has in some instances pervaded the ranks of these millions of unoccupied young people, and in some situations this may have an adverse social reaction. As a sop for any such general maladjustment, the Junior Achievement movement was inaugurated, and spread throughout the country. Through Junior Achievement, young people who have completed academic training and who can find no employment, join together in a voluntary co-operative group activity, devoting their otherwise idle time to a pursuit of practical training by trial and error methods.

The Pittsburgh Personnel Association, having investigated accomplishments of the movement in New England and New York,

undertook to establish a Junior Achievement organization in Western Pennsylvania. With the permission and assistance of the Metropolitan Junior Achievement, the national parent organization, they then established Pittsburgh Junior Achievement, Inc., a non-profit corporation. The Pittsburgh Junior Chamber of Commerce and many individuals have become actively associated with the group, and have given generously of their time in the further development of the work.

Junior Achievement uses a corporate form of company structure as the medium for group activity by which the young participants are trained. Any six or more young people are eligible for organization. This group must select four adult advisers who counsel the young members in their corporate training. These four counsellors should have experience in general business, production, design and selling.

When members and advisors are ready to proceed, a charter is applied for, and issued by the parent Junior Achievement organization. After the company (non-legal) has been formed, the members begin to learn, through actual operations, the ramifications of business. James Starn's letter is evidence of some of the experiences not only of himself, but of all participants in a Junior Achievement group.

This movement is certainly not a "cure-all" for youth unemployment. It can, however, demonstrate some means of making idle hours constructive hours. It trains temperaments to become automatically adjusted to situations arising in the world of industry and business. It can correct the "bug-a-boo" of "no experience."



*Twin-Boro Specialties, Inc.  
Verona, Pennsylvania  
August 13, 1940.*

*Pittsburgh Jr. Achievement Inc.,  
J. Blair Easter, Executive Director  
Pittsburgh, Penna.*

*Dear Mr. Easter:*

*I wish to take this opportunity of thanking you for what Junior Achievement has done for me.*

*When I graduated from school I had the idea I was completely prepared for a job. I was soon shocked into realization that my academic knowledge was useless unless I had experience in applying it.*

*Employers never asked me what I knew but always "What can you do and what experience have you had doing it."*

*I was gradually becoming disgusted with a system which wouldn't give youth a job unless they had experience and wouldn't give them a job to get experience. I was ready to climb on the first bandwagon that offered me a chance. Luckily that was Junior Achievement.*

*Junior Achievement has given me a chance to apply everything I knew and everything I could learn.*

*I have been taking a course in accountancy. As Treasurer of my company I set up a system of bookkeeping and could get practice in applying new principles as I learned them.*

*As stockholder and director I received first hand information of the problems and rights of capital.*

*As a laborer I learned of the attitude of labor and have had to conciliate this attitude with my views as capital.*

*As an officer of my company I've had to put aside personal likes and dislikes and concentrate entirely on coordination of our business to produce a profit. I have had practical experience in making production costs and production time studies.*

*To teach me the most modern ideas I have had the advice of men who are at the top of their fields—production, purchasing, merchandising, accounting, etc.*

*Where else but in a Junior Achievement company could I get such a wealth of experience in all phases of business. No matter which field I eventually find myself—capital, management or labor—I shall have an understanding of the others.*

*Junior Achievement has changed for me the words "American system of business" from merely a phase to a living activity which must be preserved.*

*Thank You,  
James H. Starn  
General Manager*

NOTE: The above letter illustrates to an exceptional degree the advantages which have been noted in the work of "Junior Achievement" and will give the reader the reaction of one of the beneficiaries of this movement. Editor.

## VACATION EMPLOYMENT

HAROLD M. MYERS

*Department of Cooperative Education  
Drexel Institute of Technology*

Each summer several thousand college men are confronted with the question: "Shall I try to get a job this vacation or shall I have a good time at dad's expense?" In many cases family financial conditions will dictate the former course, and in others the student may seek employment of his own volition. In either event, the next natural question to disturb his mind is: "Where can I get a job?"

Assuming that the larger proportion of college men will wish to secure employment, let us consider some of the implications in this all-important question of finding a summer position. The logical person for the young man to turn to for advice is the college Placement Director, so the responsibility is his to help the youngster with the problem.

There are four important factors to be considered before advising the student as to where he may go to seek employment. These suitability factors, as they shall be called, are general physical makeup, training and educational background, experience, and personality.

It is certainly important that the man's physical stature be considered in deciding on the type of work for which he is best suited. The man who is five feet six inches tall and weighs one hundred and twenty-five pounds should avoid the ditch-digging jobs and seek something less dependent upon physical strength. Thus, it may be seen that the human physique and general health do play an important role in this drama of securing employment, even though it be only for the summer period.

Naturally, it is advisable for the student to secure a job in which he can most fully apply and practice the theory he has

studied. If the young man is studying law, it is certainly to his advantage to secure employment in a law office rather than in an airplane factory. The student must recognize this situation and seek a job as closely allied to his studies as possible. Needless to say, a student should not attempt to find a job for which he is not prepared. For example, it would be greatly to the disadvantage of the chemical engineering freshman to try to secure a job which would necessitate his knowledge of volumetric analysis since the chances are that he will not receive instruction in this subject until his sophomore or junior year. There is a real danger here, for if a student accepts a job that requires an educational background in advance of the one he has, and he is dismissed as a result of his failure to measure up to his employer's expectations, it may cause him to become discouraged and dissatisfied with his course of study.

Any previous industrial experience will greatly influence the student's decision as to where he will try to secure employment. It is a correct assumption that it will be easier for him to find employment in an industry in which he already has some experience. If the young man is interested in continuing to work in the field of endeavor in which he has some experience, the problem becomes greatly simplified; however, let us assume that this is not the case and that he wishes to find a job in an industry in which he has had no experience. He may be a young man who has always spent his vacations on his grandfather's farm, but now that he has completed his freshman year in the School of Commerce, he wishes to work in an industrial office for the summer; the problem which he then must face

is that of selling himself (a questionable quantity) to some employer.

The young man's personality, as any personnel manager will affirm, is of the utmost importance. A man with a good personality for a particular type of job or industry has a definite advantage that will accomplish much in off-setting any lack of knowledge and experience, as far as the employer is concerned. It must be remembered that there are men who are primarily suited to a small organization, while there are others who are better fitted for the large company. Another consideration is that companies have personalities the same as do individuals and, therefore, it is important that the individual find employment in that organization for which his personality is best suited.

By giving all four factors their maximum consideration, and by finding an employer who will give him a job for which he is best qualified on the basis of these factors, the student can come nearest to achieving what is being done by those colleges coordinating practice and theory. This is especially true if he can arrange to spend each vacation period with the same employer, and if the employer will cooperate by giving the trainee work in various departments so that he may secure good basic training.

### Industry's Reaction

Those in placement work know that industries are always on the lookout for good material for their organizations, and the employment of college students for the summer vacation period affords employers an opportunity to observe these men and to determine whether or not they wish to consider them for permanent employment after graduation.

The company may be able to use these men to fill the jobs left vacant while their regular employees are on vacation; natu-

rally, when the vacation period is over, the students will return to school and the company will not be troubled with the problem of finding another job for an extra employee or be faced with the distasteful task of laying off a man. In such cases, the employment of students for the summer is to the mutual advantage of both parties. There are also those highly seasonal industries, such as canning and building, that can advantageously employ the student for the vacation period. Often a company can employ a man for two or three of his vacation periods and thus acquaint him with its business, routine, problems, and personnel, so that should it wish to employ him permanently after graduation, it will have a man already familiar with its work, procedures, and policies.

Summer employment is well suited to some industries. On the other hand, there are many in which it is nearly impossible for the student to secure a vacation job since summer may be their slow season. This is particularly true of the department stores and public accounting firms. However, it is usually possible to find an allied industry in which equally valuable experience may be secured. Men interested in merchandising should try the summer resort shops, and those interested in public accounting would do better to try the industrial offices where they may secure employment on some detail work that would undoubtedly prove to be valuable to them in seeking permanent employment in public accounting.

Those men who fear that their lack of experience may be an unsurmountable obstacle in securing employment should keep in mind the fact that there are many openings requiring no experience; the "promoting from within" policy in American industry means that there are jobs at the bottom for competent men. The ease with which a student may secure summer employment is

dependent upon the same four qualities that so largely influence the selection of permanent men. The qualities considered by the prospective employers are the applicant's academic standing, extra-curricular activities, general appearance, and suitability for the particular type of employment.

There is an incalculable amount of experience to be gained by the student in securing his own job, for as often has been stated, "this job of finding a job is a full-time job in itself." One of the most frequent complaints registered with college placement officers by employers is that college graduates, in spite of their superior education and training, cannot seem to sell themselves. The men seeking summer employment should be urged to depend upon themselves to sell their services, for it is better for them to blunder as undergraduates than as graduates. These young men should be encouraged to actually organize and plan their "job finding" campaign. A few well-directed words of advice from the placement director will save the applicants from many of the pitfalls usually encountered by the inexperienced job-seeker. They will also have the opportunity to gain valuable experience in writing letters of application, and most important of all, they will learn to handle themselves during the personal interview. Probably the experience gained in securing a job will be as valuable as that gained from the work itself.

On the job, the student has the opportunity to gain experience that may prove to be invaluable, and on which he may be able to capitalize to his advantage after graduation. He has the opportunity of studying and becoming acquainted with the actual mechanical operations, processes, and procedures, all of which may be routine after one becomes familiar with the work, but all of which are important to the neophyte if he is going to learn the business and become

a real asset to the company. While working, he will undoubtedly produce something that is essential to the whole process, and for which he will be paid. In producing something of value, the student will gain a feeling of self-accomplishment that will, under our present economic system, encourage him to do greater things. This will be recognized and rewarded by industry either in the form of a promotion or increases in the rate of pay, or both.

Placement directors often receive complaints that college graduates are inclined to assume an attitude of superiority which may cause hard feelings on the part of the other employees. This is especially true if most of the employees are not college men; however, this attitude is usually an unconscious one and very seldom purposely displayed, but is something against which the college student and graduate should guard. The student will usually lose such an attitude or probably will never get it if he works in industry during his summer vacations. By working with the men whom he may some day be supervising, the student will have the opportunity to become acquainted with the workers' problems, and thus will be able to understand their feelings and reactions. If the vacation job, regardless of its nature, gives the student an insight into both the workers' problems and those of management, it has justified itself. A great deal of worthwhile experience and knowledge may be obtained while working on nearly any job but, of course, if the work is closely allied with the young man's studies, it will be of greater value to him.

The practical work will impress upon the student the importance of learning the theory thoroughly. This may be especially helpful to one who is inclined to "slide through" his studies. The job will give him a chance to observe the practical application of the theory, and perhaps see and suggest improvements that could be made in indus-



try. On the other side of the picture, he may run into problems to which he will find the answer upon his return to school. Undoubtedly, he will profit from both situations and his experience will tend to make him a better and more serious-minded student.

This summer work may in some cases greatly influence the student's career. After working in industry, he may discover that the course he has selected is not the one he really wants. This has happened to students many times; for instance, the young man who has decided on Chemical Engineering and who has completed his freshman year in college in this course may discover, after a summer's term of employment in the pilot plant of an oil refinery that his interest lies not in this type of work but rather in chemistry. This occurs frequently with the students in Chemical Engineering; however, it also happens to those in other courses, and it is certainly to the advantage of the student to realize his mistake and change his course as early as possible in his college career. The few months of practical experience may be considered to be of unquestionable value if it assists the student in deciding on the adjustments necessary in his course of study to prepare himself for the field of endeavor in which he finds himself really interested, or if it confirms his original choice of vocation or profession.

The summer contact made by the student may lead to a permanent position with the company for the employer will, without question, be willing to consider for permanent employment a man with whom he is acquainted and who is familiar with the company's work in preference to someone about whom he knows practically nothing. If his summer employer cannot give him a permanent position after graduation, it may be possible that one of the contacts made with representatives from other and allied organizations, whether they be salesmen, buyers, research men, or executives, will be the entree that is needed to secure employment with some other organization.

Of course, all will agree that one of the values secured from the summer job is the money earned. In all too many cases the savings from summer earnings is the deciding factor in determining whether or not the young man will continue with his formal education, and in most other families this financial assistance is welcomed. Summer employment is unquestionably of real value to college students and its value is increased to the degree with which the work and study are coordinated, and with the planning given to the work periods. When industry becomes fully aware of the possibilities of this program, real progress will be made and industry, as well as the student, will profit.

## PHILADELPHIA ELECTRIC COMPANY

1 1 1

*Live Electrically & Save*

# RECRUITING FOR INDUSTRY

## The Academic Viewpoint

FRED W. SLANTZ

*Director of Placement  
Lafayette College*

One of the most important functions of a Placement Bureau is the obtaining and maintaining of business relations with employers of college men. Representatives of business and industry visit our colleges and universities each year to recruit young men and women for their organizations. The longer our experience in this work continues the more we realize that we have much to learn from each other. Through interchange of observations from different viewpoints we form ideas into which we put as much common sense as we can.

The placement of seniors in their first jobs is generally regarded as a part of the college's relation to its students, and the possible replacement of experienced alumni maintains a vital connection with them.

The futures of our industries, large and small, depend upon how successful they are in attracting the right personnel, and in how well they are able to retain these individuals as loyal and enthusiastic employees. Theoretically it is still possible for a person lacking a formal education to become an important executive but it is unlikely that this handicap can be overcome. The keen mind is the first to realize the advantages of scholastic training in spite of all the faults of our colleges.

Large corporations were the first to send representatives to the college campuses to obtain potential executive material. Well organized personnel departments are in a position to handle specialized training programs for college graduates which produce efficient utilization of maximum abilities and capacities to perform useful work, and at the same time promote the incentives for enthusiasm and loyalty to the organization.

Today few companies of any consequence ignore the advantages of *systematically* inducting college trained men and women into their organizations. The ability to think straight is not the least of the advantages obtained in employing high grade personnel.

It is reasonable to assume that college placement bureaus are directed in the best way that local conditions permit and that industrial firms know how their own business should be conducted, hence the observations which follow are not to be regarded merely as criticisms. In general the relations between colleges and industry are cordial and cooperative. If it were not so, frank discussion such as this, of their common problems, would be impossible.

It is characteristic of newly formed college placement bureaus to "sound off" in the public press enumerating the wonders to be performed under new direction. This may be designed for the consumption of Mr. John Q. Public, but it does not fool the veterans, least of all the experienced industrial representatives who are in a position to make comparisons. Cheap publicity is the most dangerous expedient which eventually alienates the confidence of alumni, faculty, colleagues in personnel work, and recruiting representatives.

*Centralization* of placement in a college bureau is desirable for many reasons, chief among which is efficiency. If placement is an administrative function there are the same advantages to centralization which apply to the offices of treasurer, registrar, admissions, public relations, etc. There are some disadvantages, however, which may

*(Continued on page 33)*

# RECRUITING FOR INDUSTRY

## The Industrial Viewpoint

P. W. BOYNTON

*Supervisor of Employment  
Socony-Vacuum Oil Company*

More than fifty years ago George Westinghouse, founder of the great institution which bears his name, started a practice of surrounding himself with college graduates who had had a requisite background in engineering. Apparently he was the first college recruiter, and from that early day the practice of inducting recent college graduates has grown to such an extent that last year about 800 firms in the United States sent representatives to the various schools and colleges in America. These firms annually recruit from one or two men to several hundred. It is estimated that two or three times this number of firms make inquiry and selection of men by correspondence.

Such an increased program by industry has brought with it problems which are of mutual interest, but after 15 years of college recruiting experience it would appear that many of the problems can be simplified through a more complete understanding of the difficulties involved. Our various colleges through their entrance requirements practically control the admission of young men to the professions, and for that matter to many types of industry. Consequently it seems right to expect them to assume the duty and responsibility of training and eventually placing those whom they permit to enter and graduate from the school.

An important aspect of the college recruiting problem is the attitude of the faculty. I would recommend a coordination of personnel activities in school so that the recruiter would be able to operate through a centralized bureau, under the guidance and direction of an institutional personnel officer. Too much time and effort as well as expense

are wasted for the college, the student, and the employer when it is necessary for the latter to engage in correspondence with as many as a half-dozen separate department heads in one school. This has been evident for so many years that the writer finds it inadvisable to visit very many schools which do not centralize personnel and placement activities.

To cooperate more fully with industry it is suggested that schools and colleges have a physical set-up for placement activities which would incorporate the following features:

### 1. Pre-selection of candidates:

Many colleges do not render assistance in weeding out the men before the recruiter arrives. Occasionally interviews are arranged with no more preparation than having the students sign their names to the notice on the bulletin board. Twice I have counted 125 names on such a notice, although it is questionable if a good job of interviewing can be done on more than 30 or 40 men. Frequently recruiters find they are confronted with 50 to 60 men to interview in one day. Obviously the men are at as great if not greater disadvantage than the recruiter.

### 2. A pre-arranged schedule of interviews:

The recruiter can and should advise the personnel officer of his hour of arrival and departure. He will usually express his preference as to length of interviews—usually 15 or 20 minutes per man. If the personnel officer feels he has more than 30 men who are qualified for and interested in the work involved, he should communicate with

the recruiter regarding the necessary additional time.

3. Complete distribution of application blanks and literature:

College personnel officers should expect companies to furnish full and specific information as to working conditions, usual progress or rate of advancement to opportunities, etc. Advance publicity should be given out freely by the Personnel Bureau to students' department heads and others who may be interested.

4. Students' records:

These should include scholastic ratings, extra-curricular activities, outside employment, a photograph and references. Such records constitute some of the most important qualifications a student has to offer and should be readily available for inspection by employment people.

5. Adequate preparation of the student for his interview:

The average college student seems to have little idea what he wants to do, what he has to offer, or why he wants to work for any particular company. In the final analysis he is the only one who can sell himself, but his lot would be easier if he were to receive elementary instruction in the art of selling his services.

6. Private room for interviewing:

Privacy is the only basis of free and confidential exchange of information between the employer and the applicant. It would seem that an office or at least a section of the placement office could be set aside for that purpose. Placement interviews should be uninterrupted and the applicant permitted to tell his story in his own way, without the prompting of any university representative.

7. Faculty advice:

An opportunity to discuss a candidate with the faculty member most intimately acquainted with him, who can give a straight-forward opinion, is of great assistance to the recruiter. When an accurate picture of the student can be presented by the college placement officer, frequently a better job of selection can be done. Too often the school authorities attempt to "sell" a man although sometimes, especially in the large universities, the placement officer is completely unacquainted with the student.

It would seem necessary and advisable that vocational guidance should become more of a major activity, changing the basic attitude of students toward the requirements of industry. The last twenty years have seen marked progress in recognizing the relationship between educational and vocational guidance. The two in themselves provide sufficient occupational planning techniques, but unfortunately vocational guidance usually comes too late in the college course. Students should be able to secure complete and accurate information in regard to occupations they may be considering for a career before they attempt to evaluate abilities, interests and aptitudes. Starting vocational guidance in the freshman year will enable students to plan their college work with a greater understanding, not only of their abilities, interests and objectives but also of their limitations and inadequacies.

Ezra Cornell's utterance, "I would found an institution where any person may find instruction in any subject" states in one clear, short sentence the ultimate aim of American education, and yet too many educators are still prone to feel that their responsibility ceases with the granting of the degree, although the unemployed alumnus is obviously a liability to himself, to



society, and to the school which trained him. Some of the arguments advanced by our academic friends in denying this responsibility seem about as logical as the statement of the 95 year old Civil War Veteran who attributed his long life to his ability to run like hell at the Battle of Bull Run.

Educating a student to appreciate the finer things of life without adequate preparation to produce the wherewithal to obtain even a modest living, makes him a poor prospect for the business world. If education means anything, it means that

the individual will have secured the opportunity to develop through training whatever talent he may have been endowed with, regardless of the quality or quantity of the endowment. Too many students still fail to grasp the fact that Commencement means exactly what the word implies. Excellence in scholarship is not a complete indication of ability or worth, for success in business depends on more than ability to pass college courses, and students must start in the world of business as "lowly frosh."

## RECRUITING FOR INDUSTRY

### The Academic Viewpoint

(Continued from page 30)

be due to faulty organization and administration: a placement director may assume the attitude of a dictator, which is intolerable; basic training is under faculty direction and the product is best known to those who produce it. The opinion and advice of faculty members is invaluable in successful placement. Without complete faculty confidence and cooperation, placement of students degenerates into narrow departmental competition. Under such conditions it is every man for himself, and industrial recruiting officers must cater to the whims of pedagogues or discriminate against the whole University. Unless placement officers act as *agents* of the faculty they cannot function successfully.

Who shall have the final authority in choosing the most suitable men for an opportunity? If the placement bureau must provide a great number of interviews in order to gain popular support, the recruiting representative knows full well that he is taking a beating to satisfy the demands of a college organization. If the real object of placement is the discovery of the right candidates to meet reasonable specifications

some one must make the selection. That work requires expert attention and is the major responsibility of the directors who are paid to make decisions which will stand up under the most critical examination. Student candidates, departmental heads and industrial recruiters must have every reason to respect the judgment of this responsible authority.

The interview takes place at the climax of academic preparation. It is folly to permit it to transpire under conditions that are not businesslike. Both industry and college may be open to criticism for distracting conditions. A candidate who is interviewed in a haphazard manner where the interviewer cannot concentrate on the important business at hand, should form his own conclusions as to the business methods tolerated by prospective employers. If the set-up for the interview is faulty it is a significant indication of careless preparation and administration.

The applicant must be informed about the opportunity for employment. How should such information be made available? Printed brochures are useful but must of

necessity be general rather than specific, and when used are generally out-of-date. By these facts they are likely to leave the reader unimpressed. The spoken word is largely dependent upon the personality of the speaker. A carefully worded letter describing specific requirements is perhaps the best compromise available. Every word of such a letter is read avidly.

*Records* must be complete and up-to-date. No involved rating systems are effective. If the interviewer cannot get all the information he requires at a glance he simply will not use the record forms submitted. Personal references are the most difficult data to submit successfully. The ingenious placement officer will find a way to have available references which are to the point.

Should a student be expected to tell specifically what he wishes to do in a particular organization? It is doubtful whether such statement of objective is worth considering seriously beyond the conclusions that may be drawn from the ability the candidate has to express himself. This device was a trap employed by recruiters who were simply making the rounds when jobs were not available.

Should a candidate be coached to know the right answers by conducting model interviews? Some recruiters are greatly impressed by smooth delivery, others immediately spot the well-coached lads who deliver the stereotyped smirk and patter, and patiently sacrifice precious minutes until the self-conscious candidate finally breaks down and reveals *himself*.

The perennial quest for campus "big shots" is perhaps the most short-sighted policy perpetrated by recruiters. In order to be identified with every available campus activity the undergraduate becomes superficial in everything he attempts to cover. The recruiter rarely takes the time to find out *how well* extra curricular activities are performed; quantity seems more important

than quality. A second-string man frequently does a better job in concentrating his attention upon a single responsibility than a campus "big shot" who attempts to spread himself. The industrial recruiting representative wishes to interview the campus hero with "lots of personality." If Mr. A-1 is exhibited to every representative who may be interested, multiple offers mean multiple headaches, and meanwhile the boys who are not quite so glamorous are pushed aside without offers. And how do the glamour boys react in industry? Multiple offers have a very disquieting effect when the work becomes difficult. Even the most careful follow-up after the training frequently fails to retain the prima-donnas.

Genuine personality requires all four essential qualities "which enable a person to reach others plus the courage and willingness to do so." Intelligence, imagination, responsibility, sense of humor. Lacking even one of these, a person is deficient. Still the demand for a "good personality" is included in recruiting specifications as an absolutely essential requirement which accompanies the college diploma. Of course it is pleasant to be surrounded by personality boys but much of the good solid work of the world is done by persons who may be lacking in "It".

*Ethical conduct* is required of every party to the placement problem. The student must be taught that he can take but a single job. Fair play and open competition with his classmates is the acid test of character. The faculty and the placement officers cannot show favoritism in the serious business of assistance toward career building. The recruiter who talks big and finally discloses that he really has no authority but that all he has done is to "line up the boys" for the often perfunctory inspection of antagonistic, hard-boiled superintendents at the plant, gives the disillusioned college man every reason to suspect that recruiting is a racket.

Polite lying in business letters is a senseless insult to the intelligence. If the C. D. E. Company does not wish to include the A. B. University in its itinerary this season, why not say so frankly? Why say that business conditions prevent recruiting this year, when our own interested boys, who *do* meet men from other campuses frequently, give the lie to the correspondent almost before the letter is received? Why do industrial men fail to grasp the idea that college communities are beehives of interchange of information? We can face the truth about ourselves without flinching, but we resent keenly having our "feelings spared" by polite prevarication.

The acceptance or rejection of offers of employment requires strict adherence to ethical conduct. Some companies face the fact that good men are likely to have the choice of several opportunities. The placement bureau may be greatly embarrassed by the final selection made by candidates. How far should we go in influencing their decision? Obviously, it is unfair to expect a bureau to bring pressure to bear in order to make a choice, and then to hold them responsible if the choice turns out unfavorable. The only ethical policy is to make available all pertinent information; to take every reasonable precaution to correct misinformation and prejudicial advice; and then to require the student to make his own decision and to *stick* to his agreement. An

interviewer who carries a grudge following adverse recruiting results and thereafter punishes the university by retaliatory measures, simply does not appreciate the meaning of ethical conduct. The careful observance of ethical principles cultivates mutual respect and confidence which is basic in successful placement work.

It is more difficult than ever to keep college students interested in scholastic matters amid the distractions of conscription, C. A. A. and emergency defense activities. Academic education requires thorough training through close application. It is more vital than ever before for industry to recruit wisely and with careful regard to requirements even beyond the emergency.

Summer employment for undergraduates is one of the best devices for reliable guidance as well as for recruiting. The advantage of having a few enthusiastic undergraduates telling the campus world about their summer experience is remarkable. How can we form a fair estimate if it is not through firsthand reports of our campus associates? The advertising value of having a well-satisfied young graduate return to his college campus is incalculable. Why do great industrial organizations spend thousands of dollars for advertising and overlook the potential recruiting values of having enthusiastic graduates visit the campus of Alma Mater? The way to better recruiting can be prepared by satisfied employees.

# VOCATIONAL GUIDANCE COMES TO COLLEGE

WILLIAM PEARSON TOLLEY

*President, Allegheny College*

Higher education is still the best guarantee against unemployment. In a study of some thirty colleges and universities made a year ago, it was revealed that less than 2% of the college men and women who received their baccalaureate degrees during the depression years were unemployed three years after they left college. At the bottom of the depression it took some time to find employment, but as a rule work was found before a year had passed. Not all discovered the kind of employment they wanted, but they did find a job, and they were seldom unemployed thereafter.

From such a record it can be argued that the colleges need not waste their time in the development of new programs of vocational guidance and placement. Things are going well enough now. Education has proved its worth. Why gild the lily? Why spend time and money on something that is not needed? Why pamper our students? Why not leave them to their own devices? A guidance program may rob them of initiative and resourcefulness.

There are some educators who would subscribe to this position. They believe in psychological examinations and vocational guidance for exceptional cases but not for students who are well adjusted. The president of one of our colleges for men in Pennsylvania put it in these words: "We have no vocational guide on the campus for normal cases, hoping that there are still some people in the world who can take care of themselves." There is an echo of this point of view in the statement of another Pennsylvania president (also of a college for men) that the college should assume "as little responsibility as possible" for the placement of its students.

This, however, is no longer the attitude of the majority. In a questionnaire answered by forty-six Pennsylvania colleges a few months ago all but two take the position that the college should assume some responsibility in vocational guidance and placement. All but seven feel that the college should go even further and should provide continuous employment service, and not simply placement at graduation. Thirty of the colleges attempt to offer some form of vocational guidance. Twenty-nine maintain a centralized placement service.

Interest in vocational guidance is not a new development in higher education. After the first days of Walter Dill Scott the movement fell into disrepute because it promised more than it could perform. Nevertheless, it has had a steady growth, and colleges were interested even before the depression. The depression has simply heightened the interest and prodded the colleges into action.

It is true that education is the most effective kind of job-insurance, and that the employment record of college graduates is most impressive. The colleges, however, are not satisfied. They know that the statistics do not tell the whole story. In the last ten years they have watched an increasing number of their graduates search in vain for employment in the fields for which they are prepared. They have observed the amount of temporary, make-shift work that is becoming permanent. They are concerned about the graduates who have become disheartened and discouraged by blind-alley jobs. They know that back of the employment figures is many a heart-break.

Perhaps the chief reason for the present



wave of interest in vocational guidance is the overcrowding of the teaching profession. All of the older professions are crowded, except possibly the ministry, and there are particularly serious problems in the fields of medicine and law. It is the teacher training problem, however, that is upsetting the colleges.

The preparation of teachers has been the chief function of the majority of liberal arts colleges. The number of graduates preparing for public school teaching runs from thirty to eighty percent, with the average perhaps as high as sixty percent. In the case of women students there has seldom been any other course open. It was not until recently that the colleges have made any effort to interest women in other fields.

The colleges have been warned repeatedly that they would soon have a surplus of teachers. When the tenure law was passed in Pennsylvania, the prophecy became a fact. Many of the teachers graduated in 1938 and 1939 are still unplaced, and there is little or no prospect of their finding teaching positions. The outlook for the teachers graduated in 1940 is even darker. A considerable percentage has already abandoned hope of finding work in the field for which preparation was made.

The situation is, of course, more serious in co-educational and women's colleges than in colleges for men. There are fewer students preparing for teaching in the men's colleges and these colleges have found new outlets in economics, accounting and business administration. In the state teachers colleges the failure to place graduates has already affected enrollment so seriously that Governor James is recommending the conversion of some of the institutions into trade schools. It has not yet affected enrollment in the liberal arts colleges, but it is sure to do so if they continue to concentrate on the training of teachers.

The interest in vocational guidance is

rapidly passing beyond the passive stage. College after college is wondering what it can do to acquaint students with the facts concerning overcrowded occupational areas. They are setting up vocational guidance clinics. They are holding forums and panel discussions. They are studying the question of new course offerings and the vocational opportunities in expanding fields. Some have already made considerable headway in diverting students from teaching and other professions to social case work, merchandising and sales, nursing, laboratory technics, library science, industrial chemistry, secretarial studies, accounting, statistical work, aviation and business.

As they are making over their courses of study they are realizing for the first time how important and complex is the problem of adequate educational guidance. In the field of vocational guidance the ground has hardly been scratched. Only sixteen of the Pennsylvania colleges report the use of vocational interest inventories like the Strong Test. Only six have a centralized vocational counselling service with one or more specially trained counsellors. The plan most widely followed is to use the part-time service of a few selected faculty members or the incidental service of every instructor.

It would be easy to criticize the work that the colleges have done thus far. Many of them are just beginning to adopt a personnel point-of-view and are not ready for a comprehensive program of educational guidance. The experiments in vocational guidance have ordinarily affected only a handful of students, and it may be some time before adequate help is given to all members of the student body.

Nevertheless, the movement has gone far enough to indicate the pattern that is likely to be followed. It is evident that more and more colleges are making an adjustment to individual differences and are attempting to

personalize education. As this is done the program of vocational guidance becomes a part of a larger plan for guidance in health, social adjustment, religious education, and scholastic growth and achievement. As the personnel program is developed, specialists in different fields will be added to the staff. It will continue, however, to be a centralized and unified program. The placement agency may have a separate office and staff, but it too will be closely related to the personnel program. The cumulative record folder, the intelligence scores, the evidence built up by standardized tests of interest, aptitude and achievement, the record of growth and adjustment, the indication of special talents, and all the body of material brought together by the personnel officers will be available to the placement director and will be of indispensable value to him.

The development of centralized placement services will continue. At present the service is usually an adjunct of the education department and is limited to the placement of teachers. In the smaller schools the individual departments may continue to look out for their major students, but even in colleges of moderate size there are advantages in an efficient centralized office.

A university president makes this comment about the placement problem in his institution. "Until now," he writes, "vocational guidance and placement have been carried on by our schools and departments and the procedure has varied considerably in the different units. Results have been highly satisfactory in certain fields, less so in others. But even when they have been cooperating with the more successful departments, employers have objected to having to deal with so many separate offices.

"Our intention is to find a competent director of a central placement bureau, and with his help develop a program to meet our needs. We shall try to conserve the interest and experience of our schools and

departments and to coordinate the work of these units through the central bureau." This is in line with the trend in all the larger institutions.

As colleges develop their programs of vocational guidance, they will undoubtedly maintain a much closer working relationship with the secondary schools of their constituency. Guidance should be continuous throughout the entire experience of schooling, and once the colleges are farther along they will not wait until freshman week to begin their personnel work.

At least two Pennsylvania colleges have already developed a pre-college guidance service. Allegheny College has operated for two years an educational guidance clinic during the summer months for students not yet in college. The program is entirely divorced from the recruiting of students. Vocational guidance is treated in the clinic as simply one aspect of the larger problem of discovering the nature and range of one's interests, talents and progress to date. In some cases the clinic discovers the cause of scholastic maladjustment or handicaps and prescribes a remedial program. Students attending the clinic are required to spend two or three days on the campus taking an extensive battery of guidance and achievement tests. A full report of the findings of the clinic is made in a personal conference.

Drexel Institute is making a more direct attack on the vocational problem. It organized in 1939 and continued again this year an orientation session which permits high school students to spend ten days at a professional institution and engage in a program designed to assist them in choosing a career. There are no assigned studies or recitations in the orientation session. The program provides students with a first hand view of modern technical and industrial processes, together with a reasonable understanding of these processes. Following these

*(Continued on page 41)*

# OCCUPATIONAL GUIDANCE IN THE ELECTRICAL ENGINEERING CURRICULUM†

J. H. BELKNAP

*Manager, Technical Employment and Training,  
Westinghouse Electric & Manufacturing Company*

The engineering graduate of today is well prepared to enter his life's work. I may say that we of industry, as represented by Westinghouse at least, are well impressed with the young men who from year to year come to us requesting placement in technical positions. Their fundamental knowledge of electrical equipment is good. Their attitudes are fine and their ability to design, manage or sell can be quickly developed. Their years in college have seemingly provided a proper foundation for entrance into industry.

But I am just a little concerned about one aspect of the training received at college, and it will be my attempt in this paper to develop the thought and suggest a means whereby the colleges and industry may step closer together in the training of the young men of our country. I refer to the problems of guidance and orientation.

My contacts since leaving actual engineering work have caused me to consider very actively the matter of the choice of positions. I have had to do, in the past three and one-half years, with the selection, training and placement of young engineers within our Company. I have observed that our graduate students who come from the colleges located in the industrial areas are fairly well oriented as to the requirements of industry and the various types of positions to be found there. The farther removed the college is from the industrial center, the less the graduates know of the actual work to be encountered as they begin their industrial experiences. This situation is not always confined to the industrial areas, as we have found in certain instances that students who have had their training

in the New York metropolitan area had an entirely incorrect conception of not only the commercial, but also the design work. When these fields of endeavor are interpreted in plain language to student groups, we find that many of the individuals request consideration for other and totally different fields than first indicated as preferences on their application forms.

To give emphasis to this thought, I want you to hear what an editorial in the February 15, 1940, issue of *Sales Management* says.

"In the February 1 issue *Sales Management* reported the results of a survey made among seniors in 12 colleges and universities to determine the attitude of these men toward selling as a career. The returns were shocking. An alarmingly large number of those interviewed think of salesmanship not as a profession, not even as a business—but as an 'undesirable racket or as work for morons' . . .

"Most economists agree that in finance, in engineering, and in production we are relatively far more efficient than in distribution, and it is distribution that needs refining and perfecting if we are to reduce corporate losses and create more jobs. What a paradox it is, then, that such a large proportion of the next generation of career men looks upon salesmanship as a racket which holds no appeal for them, offers no challenge to their talents. What a paradox that salesmanship has neither seen the need for, nor been able to sell itself!"

While salesmanship in some fields is not to be desired by the engineering college graduate, it is on a distinctly high plane when it is concerned with the sale of an engineering product. I am not proposing a

†This is a digest of part of a paper presented by Mr. Belknap before the Electrical Engineering Section, Society for the Promotion of Engineering Education, Berkeley, California, June 24, 1940.

course in salesmanship, but using the editorial quoted to point out that the senior in electrical engineering should know the facts concerning commercial activities and their ultimate possibilities.

The selection of an employer after graduation is a momentous step for a young man, and the candidate for a position should have the very best counsel before launching out upon his life work. Too many individuals think only of research as their field, and they do so only because they do not have correct information as to other possibilities. Oftentimes designing is incorrectly pictured as sitting before or standing at the drafting board.

To adjust to this need, I do not propose any change in curricula. The physical sciences, mathematics and other regular courses of study are too important and should not give way to more general instruction. Reviews of the offerings of industry, however, are important, but they could be handled as sideline or "extra-curricular" activities.

Conversations with faculty advisers provide ideal opportunities for guidance. If the faculty has not had industrial experience, the industries of the area might assist by providing summer contacts and possibly employment for those interested. The industries should also be broad-minded to the extent that industrial employment should be made available to those who desire eventually to follow teaching careers. In my opinion, college work can be more effectively done after a period of preliminary service in a chosen field in an industrial organization.

Cooperative courses are ideal for orientation if sufficient choice of industrial employment can be offered, and if there are a number of definite types of activity available to one who is so fortunate as to be enrolled in a cooperative plan. Our own experience in the George Westinghouse

Scholarships in Carnegie Institute of Technology has shown that the best way to point out the various available activities is to give the scholar a chance to serve in several. In our first group of ten scholars, we found interest as follows: Mechanical Engineering, 4; Electrical Engineering, 3; Industrial Engineering, 1; Chemical Engineering, 1; and Metallurgical Engineering, 1. All of the boys were put to work during their first summer in the field of indicated first interest. They were brought together for round-table discussions and informal reports on their activities and, as a result of this opportunity for exchange of information, two men from the mechanical engineering group have expressed a desire to change their life activities and are now following industrial engineering. The second summer's experience has given each the preferred type of work, and it now looks as though all of the ten scholars will remain in the field chosen after the first experience—or confirmed by the first experience. We will, of course, stand by to counsel with all of the group—shortly to include fifty carefully chosen young men—and arrange for their final industrial experiences after definite attention has been given to preliminary assignments.

It would seem that for other than cooperative students orientation should begin in the senior year, if not as early as the junior year. Again I must say that I am not suggesting a change in curriculum to accomplish this, but rather propose that the student societies, and the local chapters of the American Institute of Electrical Engineers and the American Society of Mechanical Engineers, should be used for such purposes. Possibly the faculties should devote occasional evenings to discussions of the various kinds of work and, in these discussions, devote time to an analysis of a typical actual day's work as found in the various fields. I am of the opinion that orientation conferences are



often too general and do not supply the information needed. Industries should cooperate and supply speakers who are particularly qualified to describe the various opportunities or to trace the various steps in an order for manufacture, which order brings in all of the activities as found in that particular industry.

Orientation should carry on beyond the academic classroom. Here the industries should take up the responsibility under a definite plan and give the graduate student or test-course man the benefit of working in the various fields of activity until the right position is found. Segregation should be made on the basis of capabilities and interest, but not until the candidate has actually been tried out in the actual work which he is to follow. All of us will agree, I believe, that one can go further in serving his company and advancing himself if he is happy in his work.

If the thought spoken by Westinghouse may represent the cross section of opinion from industry, I may say that the well-balanced courses in electrical engineering as offered by the colleges of the United States provide a fine background for graduate training in design and other activities which are common within our operations. We look with favor upon cooperative work as an excellent means of orientation, and we commend cooperative graduate programs for the colleges and industries having contiguous locations. Our other suggestions for orientation allude to responsibilities which we of industry should feel toward the colleges, and it should be our effort to assist in this more or less extra-curricular type of activity. It is reasonable to expect that industry will assist in providing the indus-

trial background for those who are to teach the young men. As a comment on the product of the colleges, the attitude of the young men is exceptionally fine. We notice almost nothing of the radical thought which has been brought to our attention by the newspapers commenting on the student situation in certain of the European countries. By and large the graduate students who come from our institutions are ambitious to the point of electing almost too many courses for their further advancement.

## VOCATIONAL GUIDANCE COMES TO COLLEGE

*(Continued from page 38)*

observations in industry, each person has an opportunity for conferences about the various professional fields, such as medicine, engineering, law, commerce, home economics and library work. Since the orientation session is planned during the regular Drexel summer session, the participants may observe college students at work in preparation for many different fields. A detailed diagnosis of each individual is given under the direction of a psychologist, and the student is told whether or not he has the intelligence, interests, special aptitudes and preparation sufficient to pursue the course of study he has in mind.

The programs developed at Drexel and Allegheny are by no means the only ones. Other colleges are also devising fresh approaches to the problem. There is general recognition that vocational guidance and placement are no longer to be looked upon with indifference or distrust. They are both services that have come to stay.

# STUDENTS TRAINING COURSE JONES AND LAUGHLIN STEEL CORPORATION

THOMAS C. HAM

*Manager, Students Training Course,  
Jones and Laughlin Steel Corporation*

The factors involved in a successful industry are capital, plant and machinery, raw materials, and men. Today there is adequate capital to build and equip plants and to provide raw materials. This capital is available for established or new plants if they have trained men of the proper caliber to make them successful enterprises. As industry developed into vastly larger units and the production methods and products became more complex and technical, the need arose for accelerating the training of young college men beyond the possibility of training through experience alone.

For twenty-five years or more many large industries, especially those that are highly technical, have conducted students training courses and have developed thorough and adequate programs suited to their needs.

Through this training industries have developed a reservoir of young men, in various stages of training, ready for appointment to positions of larger authority as the need arises. The principle of training is recognized as sound and necessary in many and varied industries. For many years this corporation has selected college men and placed them in the plants, sales offices and other departments, but without a definite training course.

In the spring of 1938, at a time when the steel industry was operating at a low rate and without profit, J & L decided to organize a definite training program.

## Purpose

It is our purpose to train young college men for operating, sales, accounting and other positions. It is important to keep an adequate supply of young men training in

minor positions ready to be advanced to positions of greater importance and authority when they are needed and prepared for advancement.

We want men who have made a success in their college work. This does not mean that they must lead their class but we look favorably on men who have maintained a position in the upper quarter in their scholastic work, and who have been leaders in campus activities and have had some work experience during vacations and/or in college. We prefer men with engineering training, especially for operating positions. Men with liberal arts degree are not excluded but they should present fundamental courses, including mathematics, physics and chemistry, rather than a hit or miss course. These fundamental courses train men to think. All men selected for our training course must have outstanding personality, good physique and a good health record. Approval of our medical staff is required.

Men should be thoroughly grounded in English. The ability to organize material for a report and to present it in well-written concise English, correctly spelled, punctuated and paragraphed, is of great importance. The ability to speak effectively is also important. I think colleges should pay much more attention to training in written and spoken English.

The number of men accepted for training will vary from year to year based on the estimate of the management as to the number that can be satisfactorily absorbed. It is necessary to take a long range view in this matter and to estimate the requirements, not for one, but for five or ten years hence. So far we have been training twenty men

each year. These men have been readily absorbed before the prescribed course has been completed.

Our initial course was eighteen months. Experience indicated that this was too long and that twelve months is the proper period in our Corporation. Half of the men are assigned to our Pittsburgh plant and half to our Aliquippa plant. After they have completed the work at the plant to which

they are first assigned, in about nine months, they change from one plant to the other for experience in finishing mills not common to both plants.

Students who are going into sales work are assigned to our product sales departments for three months—a half month in each sales department. As far as possible this sales experience immediately follows their work in the corresponding operating

### STUDENTS TRAINING COURSE

#### No. 2

Starting Sept. 1, 1939

#### MASTER SCHEDULE

For Students Starting at

#### ALIQUIPPA

September-December, 1939 January-August, 1940

Department	By-Products	Blast Furn.	Steel Works	Bloom & Bar Mills	Met. Dept.	Tube Mills	Tin Plate Mill	Rod & Wire Mill	Gen. Sales
Months—O. S.	1	1	1½ 1	1½ 1	1 1	1 1	1 1	1 1	1
			Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
			March	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
			Feb.	March	Sept.	Oct.	Nov.	Dec.	Jan.
	Sept.	Oct.	Nov. 1 Dec. 15	Dec. 16 Jan. 31	Feb.	March	Apr.	May	
	Nov.	Dec.	Jan. 1 Feb. 15	Feb. 16 Mar. 31	Apr.	May	Sept.	Oct.	

After Completing Course at Aliquippa

Students will be Transferred to

#### PITTSBURGH

Department	Cold Fin. Mills	Gen. Sales	Strip Mill	Rolling Mill	Gen. Sales
Months—O. S.	1 1	1	1 1	1 1	1
	Apr.	May	June	July	Aug.
	July	Aug.	Apr.	May	June
	June	Aug.	July	Apr.	May
	July		Aug.	June	
	Aug.		July	June	

Note: O indicates Operating Men. S indicates Salesmen.

## STUDENTS TRAINING COURSE

Department Rating

Operating

Mr.

Department

Student

Please rate the above student from your personal observations while he was in your department. You may express your opinion without reservation.

## RATING SCALE

- 1—Poor (Complete failure)  
 2—Fair (Unsatisfactory but capable of improvement)  
 3—Good (Minimum satisfactory rating)

- 4—Very good  
 5—Exceptional (For outstanding merit)

NOTE: Half numbers may be used.

	Rating
1. <i>Accomplishment</i> —Has he acquired as much knowledge of your department as could be expected?	
2. <i>Interest</i> —Does he appear to like his work? Is he on the job and on time?	
3. <i>Ability to Learn</i> —Does he grasp things quickly? Does he apply what he learns in one department to other departments? Does he ask intelligent questions or make suggestions of value?	
4. <i>Personality-Tact</i> —Is he sincere? Has he made a good impression in your department? Do the men like him? Does he cooperate?	
5. <i>Initiative</i>	
6. <i>Dependability</i>	
7. Will you please review his ANSWERS TO QUESTIONS, and	
8. THESIS (Submitted herewith) and grade them on above scale—	
Have you any suggestions as to what department of the industry he would best serve, such as operating, metallurgy, sales, or other work?	

Remarks (Any other observations will be appreciated.)

Date.....

Signed.....

Please return this sheet together with student's Answers to Questions and Thesis to Thomas C. Ham, Manager, Students Training Course, General Office, Pittsburgh.



units. This gives them some perspective of sales problems, competition, details of pricing, dressing of orders and correspondence. After a month in the sales departments, they return to their next mill assignment. A sample master schedule will be found on page 43.

Our first three groups started September 1st. We may start succeeding classes somewhat earlier. We prefer to start the entire group at one time so they may be properly scheduled for work and lectures.

### Method

Students are assigned in pairs to all major operating divisions for a period of one month. While in an operating division they are under the direction of the superintendent. They have opportunities, generally daily, for discussion of operating methods and problems with the superintendent or his assistants. The objective is to have the students become reasonably familiar with methods of production and the products. They are assigned for a month to the Metallurgical Department where they are given experience in inspecting, testing and other metallurgical problems. A detailed time program has been developed for each department so that the students will cover the unit systematically and thoroughly.

Each student is given a book containing over 2,000 pertinent questions, arranged in logical order, covering the entire operating processes. These questions give the student leads and an outline of the information he should acquire and save time that would otherwise be spent searching for fundamentals.

Immediately after the training period in each operating unit has been completed, each student is required to send to the Manager of the Students Training Course a typewritten copy of the questions and his answers to the questions on that unit. In addition, each student is required to write a

thesis on each operating unit. This thesis may be a general description of the unit or a more comprehensive and detailed study of some phase of the operation. A review of these answers and his thesis will determine the student's grasp of the operations. As the monthly reports generally cover forty pages or more, it will be recognized that considerable written work is required. We believe that experience in observation, analysis, organization, synthesis, and writing is fundamental in a training course.

The thesis and answers to questions are sent to the superintendent of the manufacturing unit for grading on a scale of one to five. Three is good; four is very good; five is for exceptional merit. The superintendent also grades them on characteristics, such as accomplishment, ability to learn, initiative, tact. A copy of the grading sheet will be found on page 44. Sales students are similarly graded by the sales managers, especially on sales personality. Each student is advised of the grades attained by him.

All grades are recorded on a single sheet for each student. This record shows the length and sequence of assignments. The record indicates whether the student is progressing and also determines his relative standing. During the year each student is graded by twelve or more operating or sales managers. This record is available for review when a student is needed for a position.

The plant superintendents give all of the students, in a group, a series of discussions on each operating unit. These discussions start at the beginning of the course and follow the order of production: By Product Ovens, Blast Furnace, Steel Works, Blooming Mill, Finishing Mills, Metallurgy, Refractories. Four or more lectures are given, once a week, on each operating department. A supplementary series of evening lectures is given, generally every two weeks, on a

wide variety of subjects, such as: Theory of Rolling Mills, Psychology, Salesmanship, Contract Law, Effective Speaking, and Application of J & L Products to Industry. Each commodity sales manager discusses the products and sales problems of his department.

In addition, students are required to take one of the State College Extension Courses in metallurgy. Each of these courses consists of 120 hours of organized metallurgical study, taught by our own metallurgical staff. During the course the students are given about 175 hours of lectures.

Inspection trips to steel consuming plants and mines are arranged as opportunity affords.

Upon completion of the prescribed course, students are assigned to operating, sales or other positions for which they seem best equipped, giving regard to the student's preference so far as possible. Our experience has been that few have completed the course, as they have been wanted for positions.

It is not to be inferred that students are immediately given positions of responsibility or authority. They have to serve a rather long internship before they are equipped for the larger jobs.

Before being accepted, and frequently during the course, each student is frankly told that the most difficult period will be the few years immediately following assignment to a position, until he has mastered the work to which he is assigned. In this

period men are from twenty-three to twenty-eight years of age. They are married or want to be married and raise a family and feel the need of an income larger than the minor positions pay.

This situation is no less true of their college associates who select medicine, law or other professions. Men who choose the professions spend four years in the professional school at their own expense and then two to five years more before they are equipped to establish themselves in their life work.

The steel industry may be considered a profession. It is no longer a simple industry. Thirty or forty years ago we were in the "brown sugar" era of steel making. In the "soft, medium and hard" steel period little knowledge of grades and quality and application was necessary or even existed. We have passed out of the first phase of steel making, when the emphasis was on tonnage and little attention was paid to quality, into the second phase in which the emphasis is placed on quality and accuracy. Today we make a thousand grades of steel. It takes much more knowledge and thorough training to manufacture and sell steel today than it did a generation ago. It requires no less time to master even a small part of the steel industry than it does to become proficient in any of the professions. The industry is not static and one must keep abreast of the rapid developments that are taking place. Continuous growth is necessary. When growth stops; decay begins.

# PENNSYLVANIA'S JOB MOBILIZATION PROGRAM

## Aims and Accomplishments

LEWIS G. HINES

*Secretary of Labor and Industry  
Commonwealth of Pennsylvania*

Pennsylvania's Job Mobilization Program aimed to stimulate reemployment and create new jobs for idle men and women in Pennsylvania. Its fundamental concepts were to give intensive consideration of the relief problem, cultivate local responsibility and local knowledge of the situation, encourage self-reliance and self-help, and to search seriously and analytically for a practical and humane solution of unemployment.

The Program which was initiated purely on an experimental basis with the philosophy of doing as much good as possible under existing business and other conditions, produced case records of 58,513 additional jobs in private business and speaks convincingly for the success of the movement. It is the judgment of those who were most closely in touch with the situation, and who therefore have the best informed opinion, that at least 100,000 jobs in private business have resulted in the five-and-a-half month period of Job Mobilization.

Last November, 1939, the Joint State Government Commission, a non-partisan board of State Legislators, agreed upon the need for reducing the relief burden, and also that increased employment was the soundest method of accomplishing this end.

The campaign was formally opened on November 15th at a meeting in Harrisburg attended by representatives from every county. Governor Arthur H. James, members of his cabinet, legislative leaders, labor officials and representatives of veterans' and other groups pledged their support. Here, for the first time, at least in recent years, Business, Government and Labor joined

hands for a common purpose. Here was practical democracy at work.

The State-wide reemployment movement, identified as the Pennsylvania Job Mobilization Program, was headed by Walter D. Fuller, President of the Curtis Publishing Company; William A. Hemphill, a construction and management engineer on the staff of Day and Zimmerman, engineering firm of Philadelphia, as Executive Director; and Thomas S. Gates, President of the University of Pennsylvania, who served as Chairman of the Committee on Educational Cooperation.

An organization of 10,000 men and women were actually on the "firing line." They acted as the spearhead of this movement from November 15, 1939 to May 1, 1940. These people—businessmen, labor leaders, members of veterans' and civic organizations, representatives of religious and educational forces and government officials in State, county and town—appreciated fully the economic value to all in relieving the unemployment situation and reversing and reducing the relief situation. Without denying the necessity of relief, these men and women concluded that a job in private business was the best possible relief. They wanted to avoid additional taxes in 1940, which experience had shown would produce increased unemployment, thus causing increasing relief needs and increased taxation again, in a cycle of increasing momentum.

The Program has had the broad effect of arousing the people of Pennsylvania to the vital necessity of thinking and acting realistically about the trinity of unemploy-

ment, relief and taxation, and has moulded an American plan for the future.

Broad State-wide committees were set up to carry on the program. These were special groups concerned with special programs for industrial development, retail trade stimulus, religious and educational cooperation, women's cooperation, State business association cooperation, and for necessary finance and report activities.

As the program developed, it had three distinct phases—reemployment through efforts of business and individual employers, in which the industrial committee and State business association committee were principally active; the renovizing effort, which became the principal responsibility of the

women's committees, and the need for occupational training and retraining to fill a long term need.

Each of these three phases showed the need for applying business principles to economic problems. Many jobs were developed simply by removing artificial barriers to reemployment.

Certainly, Pennsylvania stands today as a State where every constructive force and thought is marshaled to secure jobs for the unemployed. The fact that every constructive force in the State joined hands in the voluntary, non-partisan Job Mobilization Program is in itself a major accomplishment probably unduplicated in a peace-time activity anywhere.

*—an unbroken dividend record  
for fifty-six years*

THE UNITED GAS IMPROVEMENT CO.



---

## PRESIDENT'S STATEMENT

---

Presented at a meeting of the Executive Board,  
The Pennsylvania Association of School and College Placement  
May 21, 1940

Our Executive Committee, in assuming the leadership of this new State-wide Association, under the auspices of the Governor's Committee on Educational Cooperation, of which President Thomas S. Gates of the University of Pennsylvania is Chairman, should constantly keep in mind two outstanding objectives, namely to try to improve the techniques of the placement of youth, and to try to promote a greater degree of cooperation between the schools, colleges and firms of the State in the work of placement.

The Sub-Committee which was responsible for recommending the establishment of this new Association approached the entire problem in a constructive spirit, and in complete accord with the purposes of the Committee on Educational Cooperation, which was, of course, an organic part of the Governor's Job Mobilization Program.

It is believed that this new Association should make a concerted attack upon the problem of unemployment on a long-range basis, as far as it may properly be considered to come within the province of an Association of this character. The presidents of essentially all the colleges of the State have signified to President Gates their willingness to cooperate in this highly important move to consolidate past gains, and to inaugurate new plans for the benefit of youth, as they emerge from the public and private schools and colleges of the State.

This organization has been asked by the State Superintendent of Public Instruction, through the Committee on Educational Cooperation, to consider the still imperfectly solved problem of placement for students as they leave or graduate from the public schools, and this Association should

now approach this question systematically, in an effort to formulate workable plans for meeting this situation effectively, with due deference, of course, to all efforts previously undertaken, and also to the wishes and needs of the State Departments.

Our Association should, I think, plan to include in its researches a careful study of the vocational training and retraining of youth and of the unemployed generally. Apprenticeship systems and work programs for youth should assuredly be included in our program. Bottleneck unemployment should be carefully considered, in an effort to avoid local cases where there are many people unemployed, with a pressing need for skilled workers, and no workers available who possess the required skills.

Among its most significant tasks should be a continuation of the study of Occupational Trends and of Occupational Orientation Courses of study for the schools and colleges, both of which have been started as part of the work of President Gates' committee. A knowledge of occupational trends is highly important to successful vocational counseling, and the inauguration of occupational orientation courses in the schools and colleges seems necessary if the youth in our educational institutions are to be guided effectively into proper choices of suitable careers.

The Association should give its careful attention to the relation of in-school work programs to out-of-school placement, including this particular phase of the National Youth Administration projects, and also to Student Employment programs in the schools and colleges generally. It is believed that more school and college graduates fail in their employment after completing their

educational work due to a lack of the homely virtues of self-reliance, persistence and a cheerful application to routine tasks, than to a lack of training for their jobs, as supremely important as this latter is to the problem in question. Our Association might thus well approach this particular aspect of the matter at the source of the difficulty, namely in the home, in the school and in the college.

The Association might also bring into its program early studies of the law of supply and demand in relation to college graduates in various fields, in an earnest effort to detect those fields which are over-crowded, and those where a deficiency of trained workers exists. Also, a constructive study of the difficulties of placement for handicapped people in cooperation with such institutions as those of the deaf and of the blind.

We might sum up the main purpose of the new Association by saying that it should aim to render helpful assistance to the youth of our State in every walk of life. The cooperation of all schools, colleges and firms should be sought energetically and systematically so that we may present a united front in the approach to this problem which affects the very life of the Commonwealth.

In its work of publishing a quarterly Journal, the Association should, I think, strive to stress the fields of Personnel, Counseling and Placement, since these three fields present a channel for close coordination and effective direction towards the solution of many placement problems. The

Journal should also include other major objectives of the Association in many allied fields.

In our approach to this really comprehensive program, we should not make the mistake of overlooking, or of minimizing the vast amount of work which has already been done in many agencies throughout the State and the Nation, and I feel that we might all try to approach the matter in a spirit of open-mindedness, and in the form of an honest search for ways and means for making a proper attack upon those questions which the main Committee has entrusted to our care. There is, obviously, a vast field to be explored, and many things may have to be overlooked because of a lack of facilities with which to undertake them. However, even with very limited resources, but with a will to be helpful wherever possible, there is a likelihood that we may be able to accomplish much for the good of youth everywhere.

Finally, the purpose of these preliminary comments is not to try in any sense to determine, in advance, the exact channels in which we are to start our activities, but rather to give a general outline of the objectives as I see them from my previous work on the State-wide Committee on Educational Cooperation.

Respectfully submitted

*Clarence E. Clewell*

President

---

## ASSOCIATION NEWS AND NOTES

---

### College of Chestnut Hill

There is an increased emphasis on guidance of Freshmen at the College of Chestnut Hill. Results of preliminary interviews with the Dean are given to the Freshman Counselor who records and files in her office all details, academic, financial and social that may contribute to the more intelligent guidance of new students.

Sister Maria Kostka, Dean of the College, reports that some tentative work has been done in the way of following up occupations of alumnae. It is hoped that this survey may be continued throughout the year.

### Ithaca High School

Ithaca (N. Y.) High School has maintained a Placement Bureau for the last eight years. Since 1932, when it was planned and organized by Robert Farnsworth, head of the school's commercial department, the Bureau has served efficiently as a bridge from school to work. In one year, June 1938 to June 1939, it placed 252 persons—120 of them in permanent full-time jobs.

*Weekly News Review,*  
September 9, 1940.

### Pennsylvania Institution for the Instruction of the Blind

Mr. O. E. Day has been appointed Placement Officer for the Pennsylvania Institution for the Instruction of the Blind, effective September 9, 1940. His office is located at 1305 Locust Street, Philadelphia.

### Pennsylvania Institutional Teacher Placement Association

The second annual fall conference of the Pennsylvania Institutional Teacher Placement Association was held Friday, October 4, 1940, in Room 321, The Education Building, Harrisburg. The teacher placement officials of all the State Teachers Colleges and schools of education connected

with the liberal arts colleges and universities in Pennsylvania hold membership in this Association.

The purpose of the Association is to foster co-operation and research among institutional teacher placement officials; to collect, analyze, evaluate and disseminate information concerning problems of teacher placement in educational institutions and the State Department of Public Instruction; to study problems of teacher supply and demand; to encourage the use of institutional placement bureaus by school authorities; and in general, to promote efficiency, economy and professionalization in teacher placement.

### Pennsylvania School for the Deaf

M. Wistar Wood, Superintendent of the Pennsylvania School for the Deaf, announces that in the Philadelphia area there are only about fifty men on their present list of alumni and former students who are unemployed. This is less than 10% of the school's present enrollment.

According to Mr. Wood, these alumni, although ineligible for National Defense work because of their handicap, are ready to do their share by replacing as woodworkers, auto mechanics, printers, painters and shoe repair men, mechanics of sound hearing who may be called to the service.

A Study of Employment Experiences of Boys Leaving and Graduating from The Pennsylvania School for the Deaf, since 1927, made by Harry B. Brown, Principal and Placement Officer, has been completed, and is ready for distribution.

### Pennsylvania State College

The teacher placement service at The Pennsylvania State College will be operated more efficiently, and more comfortably for those engaged in the work, by reason of the fact that the offices are now located in the

new Burrowes Education Building. The building was dedicated on August 1 and was opened to students and faculty with the beginning of the current semester.

The teacher placement activities are under the supervision of the Committee on Records and Recommendations, of which C. O. Williams, Associate Professor of Education, is chairman. The committee is concerned with the problems of admission of students to the professional courses, the student guidance program, and placement. Effort is made to co-ordinate these related activities.

#### **Pittsburgh Personnel Association**

Colonel W. H. Draper, Jr., of the Infantry Reserve, who is now on extended active duty with the Personnel Division of the War Department General Staff, addressed the Pittsburgh Personnel Association at a dinner meeting held in the University Club, Pittsburgh, on September 19. The subject of Colonel Draper's talk was "The Selective Service Act."

In civilian life Colonel Draper was a member of the New York investment banking firm of Dillon Read & Company. He was recently appointed by the President as a member of a committee to work with the Joint Army and Navy Selective Service Committee in planning the procurement of manpower for National Defense under the Compulsory Military Training Bill.

#### **Sam Houston State Teachers College**

Sam Houston State Teachers College (Huntsville, Texas) has reorganized the administration of its placement facilities. Due to a growth in enrollment from 837 to 1,500 in two and one-half years the college has established a new department of public service. This department is charged primarily with taking care of all outside contacts such as public relations, news service, instructional films, teacher placement, exten-

sion classes and correspondence courses. In connection with the teacher placement activities, the college is bending every effort to increase its service both in placements and follow-ups. The new work has been in progress for one year. Mr. W. E. Lowry is Director of this department.

#### **University of Chattanooga**

At each meeting of the Occupational Orientation class at the University of Chattanooga a representative of a different field lectures on the possibilities in that particular field. In his talk the lecturer defines the field, its extent and divisions; its special implications; its future, both general and in Chattanooga; its attractive and unattractive features; employment and advancement possibilities, especially for college graduates; general qualifications for success; and professional training required or desired.

During the College year 1939-1940 some eighty students were registered for credit in the course and others attended as auditors when interested. The subjects discussed included the purpose and character of the course and a general picture of the occupational life of Chattanooga; "How to choose an occupation"; "How to apply for a job"; "Occupational opportunities in the field of accountancy"; "Occupational opportunities in insurance"; "Opportunities in scientific work"; "Opportunities in the field of salesmanship"; "Opportunities in the field of women's work"; and "Opportunities in the field of education." Other meetings were devoted to consideration of other fields, such as industry, law, etc.

The course is being continued this year, and is proving increasingly popular.

#### **University of Pennsylvania**

Effective July 1, 1940, Provost George William McClelland appointed Mr. E. Craig Sweeten, Jr., Assistant Director of Placement, and on that date Mr. Sweeten took



up his new duties in the University of Pennsylvania Placement Service.

As an undergraduate in the Wharton School of the University of Pennsylvania, Mr. Sweeten was president of his class for three years, captain of the soccer team, a member of Phi Kappa Sigma, Sphinx Senior Society and Phi Kappa Beta Junior Society, and on Hey Day, 1937, was awarded the traditional Bowl by his class.

Since graduation from the Wharton

School in 1937 he has been on the staff of the University's Bicentennial Fund. As field secretary of the fund organization he has met and associated with alumni in many parts of the country and has become familiar with their problems as alumni. He is a member of the University's General Alumni Society, the University Club, the Philadelphia Cricket Club, and other organizations.

## LETTERS

THE WHITE HOUSE  
WASHINGTON

May 17, 1940

My Dear Mr. Clewell

I wish you every success in your work for the Pennsylvania Association of School and College Placement. I hope that through contacts with industrial leaders, new industries and services may be inaugurated to create new jobs.

Very sincerely yours,  
*Eleanor Roosevelt*

COMMONWEALTH OF PENNSYLVANIA  
GOVERNOR'S OFFICE  
HARRISBURG

THE GOVERNOR

May 1, 1940

Dear Dr. Gates:

On behalf of the people of Pennsylvania, I thank you most sincerely for the important and public spirited part you have played in the Job Mobilization Campaign, which closes today.

The campaign was a success. Because of it—because of the unselfish work done by yourself and many civic-minded citizens—conditions are much better in Pennsylvania today than they were when this attack on the problem of unemployment, relief and taxation opened last November.

I know you rejoice with me in these signs of an improving order; and you have a right to be proud of the fact that you helped to bring them about.

However, the concrete evidences of improvement are not the major accomplishments of the campaign. A new feeling of confidence and hope and courage has been generated. The unemployment problem has not yet been solved, but a beginning has been made. The people of Pennsylvania have the satisfaction of knowing that for the first time in the history of any state, they have joined wholeheartedly in a successful effort to improve conditions.

I hope that this new psychology and cooperation by labor, industry and government in coping with a common problem will continue. Plans now are being worked out to carry on the objectives of the campaign through appointment of committees of citizens by the various County Boards of Assistance under the Van Allsburg Act. I have every confidence that you will continue to apply your thought and action to the problem, and that you individually will do all you can to meet the responsibilities that face us.

Again thanking you for your splendid contribution to the public good, and assuring you of my appreciation, I am,

Sincerely yours,  
*Arthur H. James*

Dr. Thomas S. Gates, President,  
University of Pennsylvania,  
Philadelphia, Pa.

*Note: The above letter refers to the work of the Committee on Educational Cooperation of the Pennsylvania Job Mobilization Program, of which President Gates was Chairman.*

---

## BOOK REVIEWS AND DIGESTS

---

### EFFECTIVE INDUSTRIAL USE OF WOMEN IN THE DEFENSE PROGRAM,

*Special Bulletin No. 1 of the Women's Bureau, U. S. Department of Labor, Government Printing Office, 1940, 22 pp. 10c.*

From the experience of the last world war and the twenty years that followed, many gains were made in standards of labor, not only in respect to wages and hours and collective bargaining, but also in safety, sanitation and hygiene, and the regulation of home work. Further, these standards were found to be sound, measured in terms of efficient and continuous production.

A defense program naturally speeds up industrial activity and involves serious hazards to workers, particularly to women workers. Excessive speed, work with explosive chemicals, and exposure to fumes, acids, dusts and other harmful conditions greatly increase the danger to the worker. Most timely, therefore, is the special bulletin that the Women's Bureau of the U. S. Department of Labor, in cooperation with the Labor Advisory Committee on Standards for the Employment of Women in the Defense Program, has recently issued.

The types of work for which women are particularly qualified in the industries affected by the defense program are outlined, and safety devices which have been set up are explained. Measures to protect women against the effects of industrial poisons and fatigue; adequate conditions of lighting and plant sanitation; and standards established by state regulation or required by federal act limiting hours of employment for women and providing minimum standards are briefly but clearly summarized.

At a time when the temper of public opinion is largely controlled by a single objective—speeding defense—there is grave danger that much of the gains so slowly and laboriously won will be obscured by what

seems at the moment to be a larger issue. This bulletin from the Women's Bureau points a timely warning.

Marelle Quick  
University of Pennsylvania

### LIFE PLANNING AND BUILDING,

*Harry Newton Clarke, Edited by Jessie B. Adams, International Textbook Company, Scranton, 1940. 251 pp. \$1.60.*

There is every good reason for reviewing this work in SCHOOL AND COLLEGE PLACEMENT, since the author has yielded to the temptation which probably comes to most individuals who, working in the field of placement and personnel work over a period of years and finding themselves for this reason approached by numerous individuals for guidance, finally decide that they should give their experience to all younger individuals in printed form. The basic problem to be faced is the loss of the personal contact which has previously accounted for the success obtained in helping younger individuals find their way. Mr. Clarke's success in these personal experiences has prompted him to devise a "self-analysis" method by which he hopes many individuals will be enabled to carry through the planning and building of a successful life. The "self case study" method involves the suggestion that after the individual has obtained the basic information about himself he might seek the help of an older individual, friend, teacher or school counsellor, to help him face the facts more objectively.

The book is written in rather simple language to appeal to the high school level. Unfortunately, it falls into the rather questionable method of inspiration and something of the glorified "Horatio Alger" device. This, however, is not done so much for specific vocations but one senses it throughout the entire text. The author's



## LOOKING AHEAD

Among his financial advisers today, many a business man gives top place to the Penn Mutual representative who is looking after his life insurance program.

This program may provide a monthly income for his wife; funds for his children's college education; ready cash for expenses connected with the settlement of his estate; a life income for himself at retirement age.

In order that Penn Mutual policyholders may depend on first-class life insurance service, the Company's representatives are carefully selected and adequately trained for the important work they are to do.

For the man whose ability measures up to the high standards required in life insurance selling, this business offers unusual opportunities and worth-while financial rewards.

**WILLIAM A. ARNOLD AGENCY**  
Harrisburg

**HOLGAR J. JOHNSON AGENCY**  
Pittsburgh

**HOME OFFICE AGENCY**  
**JOSEPH H. REESE & EDWARD L. REILEY, Managers**  
Philadelphia

### THE PENN MUTUAL LIFE INSURANCE COMPANY

**JOHN A. STEVENSON, President**  
Independence Square

Philadelphia

Introduction attempts to have the reader accept the textbook as a conference, but in reading one finds himself quickly out of the presence of the writer.

Two chapters are given to the purpose of work and the main areas of work. "The real purpose of work is to serve society" and one is urged to develop "the right attitudes" which are listed and discussed: 1. Interest in Occupation; 2. Constructive Effort; 3. Service; 4. Mission or Purpose; 5. Creative Effort; 6. Worship. It will be noted that the author stresses the factors of adaptability or adjustability in contrast to actual ability. Areas of work follow roughly the division established by the Census Bureau, but the author finds difficulty in expressing any positive concept of the different levels of employment throughout the various fields of work. His mention of the various levels is a negative one, as when he suggests that, if one cannot be a mechanical engineer, that there are many other mechanical jobs which he might consider. One somewhat surprising overemphasis is to be observed in the discussion on government positions where the author stresses the "graded scale of promotion which brings a security so desired by many people." The further the author gets from the industrial and business world the less adequate are his descriptions and suggestions concerning the professions such as the ministry, medicine, law and the arts.

Two chapters are given to instructions in the development of an individual inventory and the analysis of interests and traits. The individual is advised to go into great detail collecting information under six headings: family history, reading and other personal preferences, things started, things finished, habits of orderliness and social activities. One is surprised to find that "careful study of the members of one's family may help to locate possible inherited aptitudes and work interests"; and yet if there is any defense for such a procedure, Mr. Clarke has certainly

indicated the best possible use that could be made of it.

There is a chapter given to a series of samples of inventories with analyses and with interviews, and there is also an Appendix with further illustrations.

The remainder of the text is given to the suggestions for exploring the areas of work, the finding of the first job, adjustments, advancement and some rather practical suggestions in the intelligent use of money, time and the development of pride of work.

In the midst of the text the editor, who is Counsellor in the Division of Guidance and Placement in the Department of Education, New York City, has written a chapter upon making the most of your school days. This chapter lies between the material leading up to discovery of the work interest and the period of work and adjustment in the same. The chapter aims to reveal the various sources of help within the school system, and also the various types of school curricula. The editor does not lower the inspirational tension of the author.

It is almost impossible to estimate the effectiveness of this type of material, since the individual factors of self-motivation play so large a part in the use of the same.

One must reemphasize the warning to others who in time might yield to the temptation to write the same type of material, that the passing on of one's personal "experience" en masse will always be difficult, to say the least.

Robert Brotemarkle

University of Pennsylvania

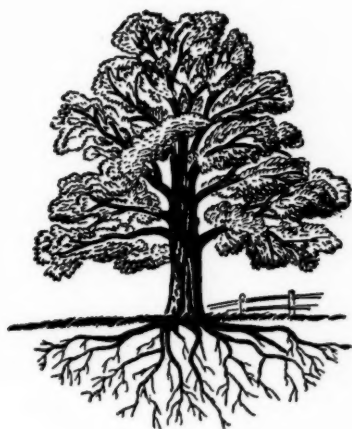
**STAND BY FOR THE LADIES!** The Distaff Side of Radio, Ruth Adams Knight, Coward-McCann, Inc., New York, 1939, 179 pp., \$1.75.

From the experiences gleaned in a decade of radio work, and newspaper and fiction writing before that, Ruth Adams Knight has





# IT'S MIGHTY LIKE A TREE



Though it spreads across the entire nation, the Bell Telephone System is simple in structure. You can think of it as a tree.

## BRANCHES

The 24 associated operating companies ... which provide telephone service in their respective territories.

## TRUNK

The American Telephone and Telegraph Company ... which coordinates system activities, advises on telephone operation and searches for improved methods.

## ROOTS

Bell Telephone Laboratories ... whose

functions are scientific research and development; Western Electric... manufacturer and distributor for the system; Long Lines Department of A.T.&T. ... which interconnects the operating companies and handles Long Distance and overseas telephone service.

\* \* \*

With common policies and ideals, these Bell System companies work as one to give you the finest, friendliest telephone service... at lowest cost.



prepared a thorough, interesting and amusing survey of the opportunities radio presents for women. *Stand By For the Ladies!* covers virtually every phase of radio in which the female of the species would be interested.

Miss Knight first gives a remarkably full yet brief history of women in radio, which is practically a history of radio itself—for women have been in it or of it, in some measure, since its earliest days, twenty years ago.

Her opening example of women in radio is the anonymous program manager for a major broadcasting company, who got her first radio job with a Westinghouse experimental station in 1922. Other shadow biographies of women who have contributed to the advance of radio, and who have taken their sustenance from it, are not anonymous. So does Miss Knight present her account of the development of radio as a toy, a science, an art and an industry.

Miss Knight tries to paint a not too brilliant picture of the trials the woman trying to get ahead in radio work will have to cope with. She recounts the prejudices and difficulties as well as the vast number of opportunities.

Whether the reader covet the field of radio as a means of projecting her talent as an entertainer or writer, or if she is concerned with the commercial or technical sides—production and administration—she will find advice here—well backed up by the experiences of someone who has preceded her.

*Stand By for the Ladies!* stands recommended for all girls and women who may yearn for a career with the air waves.

The introduction is by Lenox R. Lohr, until recently President of the National Broadcasting Company.

#### **THE FIRST FIFTY YEARS OF THE TRAINING SCHOOL FOR NURSES OF THE HOSPITAL OF THE UNIVERSITY**

**OF PENNSYLVANIA, Mary Virginia Stephenson, J. B. Lippincott Company, Philadelphia, 1940, 206 pp., \$2.50.**

The author, Miss Mary Virginia Stephenson, R.N., who has been Superintendent of the University Hospital for many years, has presented here a very clear picture of the nursing profession of the past and present. The development of the Training School is aptly woven into a background of Hospital activity, so that the reader also becomes well acquainted with the marked growth of the University Hospital during the period covered.

For those who are contemplating the study of nursing, this volume may be highly recommended for its embodiment of the high ideals of that profession.

**SIX WAYS TO GET A JOB, Paul W. Boynton, Harper & Brothers, New York. Probable publication date, January, 1941. Probable price, \$2.00.**

A highly successful interviewer and placement officer (see page 31 this issue) who has helped thousands of young men into new positions here gives the boiled-down essence of his conclusions on job-getting methods.

**THE STRATEGY OF JOB FINDING, George J. Lyons and Harmon C. Martin, Prentice-Hall, Inc., New York, 1939. \$4.00.**

Here is a book that gives a tested method for finding the job you want. The authors show you how to determine the career field you are fitted for, how to get interviews in the companies you select, and how to put yourself across with the employment manager.

**A GUIDE TO GUIDANCE, Charles M. Smith and Mary M. Roos, Prentice-Hall, Inc., New York, To be published October, 1940. Price not determined.**

A complete program of vocational guidance for junior and senior high school levels,



## AMERICA'S FIRST LINE OF DEFENSE

AMERICA'S first line of defense is American industry. It is to industry that the nation looks today for the armaments to protect America's high living standards, to defend the American way of life.

In the last two generations American industry has built a great nation. Its workmen, scientists, and engineers have given us electric lights in 24 million American homes and electric refrigerators in 13 million—conveniences which represent the highest standard of living in the world. And the manpower, the inventive and manufacturing genius, the experience, the daring to tackle difficult tasks—assets which have helped to produce this high standard of living—are among America's strongest resources today.



*Not a cannon, but the 130,000-pound shaft for a great electric generator being built by General Electric.*

Industry today undertakes the task of building, not only armaments, but, equally important, the machines that can be used to manufacture these armaments. And General Electric, which for more than sixty years has been putting electricity to work in America's peacetime pursuits, is today applying it to the new job—the job of defending the benefits electricity has helped to create.

*G-E research and engineering have saved the public from ten to one hundred dollars for every dollar they have earned for General Electric*

# GENERAL ELECTRIC

962-7788

## Quaker City Laundry

Philadelphia

Seashore

Established 1864

- *Offers a Superior  
Dry Cleaning Service  
and Cold Fur Storage*

Gra. 1121

based on a realistic grasp of current employment conditions.

### OPPORTUNITIES TOMORROW

(Continued from page 13)

and the United States Office of Education are both working on the problem of developing and furnishing adequate information to placement workers so that better employment assistance can be rendered. The main reason for this brief article is merely to indicate some of the possibilities which may take shape in the future and some of the work that is being done to provide facilities and tools which will ultimately assist in the better performance of the essential profession of placement.

## NATIONAL DEFENSE AND OCCUPATIONAL TRENDS

(Continued from page 6)

ployment in agriculture and mining; and continuously increasing opportunities in the service occupations, especially for those with ingenuity enough to create new services. The exceptions alluded to are the machine-tool industry and the industries directly engaged in the fabrication of armaments and other war materials. In the machine tool industry, upon which virtually every other manufacturing industry is dependent for its essential machinery, there will continue to be an urgent need for highly skilled craftsmen, such as machinists, tool and die makers, and welders. Other industries will need structural iron workers, ship fitters, heavy sheet metal workers, lens makers, instrument mechanics and other craftsmen whose training is necessarily extensive in greater numbers than they will be available. The greatest numerical need, in the months immediately ahead, will be specifically trained machine operators. This need, however, is the easiest to fill, for training is relatively brief.

### UNITED ENGINEERS & CONSTRUCTORS INC

NEW YORK    PHILADELPHIA    CHICAGO

MAXIMUM RETURN TO CLIENTS PER DOLLAR EXPENDED



---

## CONTRIBUTOR'S PAGE

---

**Samuel Spiegler** was educated at the University of Delaware (A.B., 1928), Teachers College, Columbia University (M.A., 1930), and New York University. He has held a variety of jobs, including the equivalent of two years as a machinist's apprentice, coordinated with high school study under a cooperative arrangement between the school and local industries in Wilmington, Delaware.

Since graduation from college he has taught English and History in Jersey City, N. J.; been a Library Assistant at Columbia University; Assistant in Higher Education and History of Education at the same institution; Junior Specialist in Educational Measurements, U. S. Office of Education; Supervisor of research project in juvenile delinquency, under direction of Dr. J. B. Maller, at Columbia University; and Research Assistant, Regents' Education Inquiry (New York State). From February, 1937 to April, 1939, he was with the National Occupational Conference. During this period he prepared numerous "Occupational Abstracts," and articles for *Occupations*, the *National Vocational Guidance Magazine*. Since May 1939 he has been Managing Editor of *Occupational Index*, and Office Manager for Occupational Index, Inc.

Mr. Spiegler is author of "Teaching as a Man's Job," "Occupational Adjustment: Interim Report," and "Some Personal Aspects of Industrial Conflict." His article on *National Defense and Occupation Trends* appears on page 3 of this issue.

---

*Vocational Schools Respond "Ready Now"* is the work of **Dr. Paul L. Cressman**.

Dr. Cressman is a Pennsylvanian, who was graduated from the Keystone State Normal School at Kutztown in 1912, and completed his undergraduate work at the University of Pittsburgh in 1925. He did graduate work at Teachers College, Colum-

bia University, and completed the work for the degree, Doctor of Education, at The Pennsylvania State College in 1935.

His experience includes grade school teaching at Lehigh, Pa., three years teaching at the State Normal School, Bloomsburg, Pa., teaching at Uniontown (Pa.) High School, and the Academy High School, Erie, where he became Director of Vocational Education. Following this he did some work in the fields of continuation school and industrial education in the Pennsylvania Department of Public Instruction, after which he served as Assistant State Superintendent of Public Instruction in the State of Michigan, for two years. Since 1936 Dr. Cressman has been Director of the Bureau of Instruction, Department of Public Instruction, Commonwealth of Pennsylvania. His article is on page 7.

---

**Dr. A. M. Weaver**, whose article on *The Williamsport Plan* appears on page 11 of this issue, is a graduate of Lycoming County (Pa.) Normal School, and Bucknell University, and a former student of Harvard Law School, and Teachers College, Columbia University.

His professional record covers five years of teaching in a rural school in Lycoming County, some years as Grade School Principal, Liberty Borough, Tioga County (Pa.), and Vice-Principal of the Muncy (Pa.) High School. He has been Supervising Principal of the Montoursville (Pa.) Public Schools, Vice-Principal and Head of the Department of Mathematics, Williamsport High School, and Superintendent of Schools, Conshohocken, Pa. For eight years he was Principal of the Williamsport High School, and since 1926 he has been Superintendent of Schools in that city.

Dr. Weaver is a member of Phi Gamma Delta college fraternity, and a 33rd Degree Mason. He is Past President of the Central

Convention District, Pennsylvania State Education Association, and a member of the committee that drafted the present Constitution for that body.

**Egbert H. van Delden** is Assistant Professor of Management, School of Commerce, Accounts and Finance, New York University. He also is Educational Supervisor, Wright Aeronautical Employees' Association, Paterson, N. J.; Chairman, Advisory Committee, Labor Relations Institute, New York City; Member, Organization Research, Inc., New York City; and a member of the Personal Counseling Committee, West Side Branch, Y. M. C. A., New York City.

Dr. van Delden himself states "I find little time for writing articles and books as I do a considerable amount of consulting work. . . The article *Opportunities Tomorrow* (page 12) is based on my Ph.D. thesis, 'Exploration of a Technique for the Preparation of Occupational Outlooks.' "

"So You're Going to College" is the third book written by **Clarence E. Lovejoy**.

Mr. Lovejoy was born in a college town, Waterville, Maine, and grew up in Pittsfield, Mass., near other colleges.

He received his A. B. at Columbia, later studied at the Sorbonne in Paris, and Colby College conferred upon him an honorary A. M. Eight years during and following the first World War were spent as an officer of the Regular Army, and for the last four of these, before he resigned his commission and returned to civil life, he was detailed to the R. O. T. C. at Rutgers, where he was an associate professor. Since 1927 Mr. Lovejoy has been alumni secretary at Columbia University, and a department editor on the staff of *The New York Times*.

*Spare Hours to Sell*, Mr. Lovejoy's survey

of student aid and student employment in colleges, appears on page 19, of this issue.

The Executive Secretary of Pittsburgh Junior Achievement, Inc., **J. Blair Easter**, is a graduate of Lafayette College in Civil Engineering, and a member of Delta Kappa Epsilon fraternity. He received his early banking and industrial training with original international banking house of Blair & Company, New York City. He was subsequently with Dillon Read & Company.

In 1938 he became interested in the plight of American Youth, and since that time he has been trying to assist and encourage young people to find their proper place in our present economic structure. Mr. Easter is author of *Junior Achievement*, page 24.

*Vacation Employment* (page 26) is the contribution of **Harold M. Myers**, Assistant to the Director of Cooperative Education, Drexel Institute of Technology. Mr. Myers is himself a graduate of Drexel Institute of Technology, School of Business Administration, and since June, 1938, has held his present position. During the same two years he has been in charge of placement of graduates in the School of Engineering.

The James Lee Pardee Placement Bureau, at Lafayette College, is one of the few liberally endowed college placement units. **Professor Fred W. Slantz** (*Recruiting for Industry; the Academic Viewpoint*, page 30) is its Director.

Professor Slantz is a graduate of the University of Pennsylvania, having earned the B. S. in C. E. in 1912, and the degree of C. E. in 1923. He has been Instructor in Graphics at Lafayette College, 1913-1915; Field Engineer, I.C.C. Railroad Valuation, C. and O. Railway, 1915-1917; Captain

---

# UNIVERSITY OF PENNSYLVANIA

## PHILADELPHIA

1740



1940

*The Work of the University is Divided into the Following Undergraduate and Graduate Departments and Other Divisions:*

The College	The Department of Landscape Architecture
The College Collateral Courses	The College of Liberal Arts for Women
The Summer School	The Graduate School
The Towne Scientific School	The School of Medicine
The Moore School of Electrical Engineering	The Law School
The Wharton School of Finance and Commerce	The School of Dentistry
The Post Graduate Division of the Wharton School	The Courses in Oral Hygiene
The Institute of Local and State Government	The School of Veterinary Medicine
The School of Education	The Graduate School of Medicine
The Division of Nursing Education	The Evening School of Accounts and Finance
The Illman-Carter Unit	The Extension Schools
The Division of Vocational Teacher Education	The Department of Physical Education
The Division of Cultural Olympics	The Division of Physical Instruction
The Division of Schoolmen's Week	The Division of Student Health
The School of Fine Arts	The Division of Intercollegiate Athletics
The Department of Music	The Division of Physical Education for Women
	The Division of Student Affairs
	The Reserve Officers Training Corps of Army and Navy
	The Psychological Clinic

---

*Information on the above University Departments and Divisions may be secured from the Secretary's Office, University of Pennsylvania, 3446 Walnut Street, Philadelphia, Pa.*

U. S. Army, Aviation; Senior Instructor in Charge, School for Radio Mechanics on Airplanes, A. and M. College of Texas; Assistant Professor Graphics, Lafayette College, 1921-1924; and since 1924, Professor of Graphics at Lafayette.

Under direction of the late Dr. Beggs, Professor Slantz worked on stress analysis in manganese steel for industry, at Princeton University. He is Editor-in-Chief of the publication of the Society for Promotion of Engineering Education on Engineering Drafting Standards. For fifteen years he has been Chairman of the Faculty Committee on Student Organizations at Lafayette, and originated the idea, at Lafayette, of the Pre-College Guidance Conferences for Boys, which is now in its eighth year.

---

**P. W. Boynton** (*Recruiting for Industry*, page 31) is his own best biographer. He says "Cornell, V. M. I. and the University of Michigan all claim me as an alumnus. . . . Some time was lost because of service in the Army, but eventually Syracuse University was kind enough to give me the Degree of A.B. Cum Laude in 1922. . . . I went to work that year for this Company (Socony-Vacuum Oil Company) as a salesman in Syracuse and, depending on your point of view, was either a good or poor salesman. At any rate the Management decided to try me out on personnel work about fourteen years ago. For the moment I have the title of Employment Supervisor. . . . I am nominally in charge of college recruiting, and a large part of the work is in connection with the engagement of young men for foreign service. . . . Harper Brothers & Company, much to my amazement, have kindly consented to publish my book entitled 'Six Ways to Get a Job' which represents my major literary effort to date."

---

**Dr. William Pearson Tolley** is President

of Allegheny College. He is also a director of the Meadville (Pa.) City Hospital; member of the Public Charities Association of Pennsylvania, Y. M. C. A.; Chairman of Executive Committee of Co-operative Study on General Education at Junior College Level; and Chairman of the Committee on Academic Freedom and Tenure of Association of American Colleges.

He holds degrees from Syracuse University (A.B., 1922; A.M., 1924), Drew Theological Seminary (B.D., 1925), Columbia University (A.M., 1927, Ph.D., 1930), Mt. Union College (D.D., 1931), Dickinson College (LL.D., 1933), and Grove City College (L.H.D., 1937). He was ordained into the ministry of the Methodist Episcopal Church in 1923. He has been President of Allegheny College since 1931.

Dr. Tolley is author of "The Idea of God in the Philosophy of St. Augustine," and editor of "Alumni Record of Drew Theological Seminary (1867-1925). His article on *Vocational Guidance Comes to College* is on page 36.

---

**Thomas C. Ham**, Manager of Students Training Course at Jones and Laughlin Steel Corporation, attended Dartmouth College, from which he graduated fifth in his class, with Phi Beta Kappa rank. He is a member of Delta Kappa Epsilon.

In 1910, he went with Jones & Laughlin Steel Corporation, in Pittsburgh, as assistant in the Wire Sales Department. From then until 1938 he served successively as Assistant Manager of Exports, in New York, and District Sales Manager in Philadelphia.

Early in 1938 Mr. Ham returned to Pittsburgh as Manager of the Students Training Course. In addition to this he has organized and conducted two general lecture courses for J & L employees on the methods of steel production and uses. His article on *Student Training Courses* at Jones & Laughlin appears on page 42.